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PUBLIC SECONDARY EDUCATION IN CANADA

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BY

W. F. DYDE, Ph.D.

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W. F. D.

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PUBLIC SECONDARY EDUCATION IN CANADA

CHAPTER I

INTRODUCTION: THE PROBLEM OF THE STUDY

During his personal contact with Canadian schools and in the course of preparing the ensuing account of public secondary education in Canada, the writer has come to the conclusion that certain statements may be made which embody important characteristics of the Canadian school system and of secondary schools in particular. These statements are to an extent hypotheses from which, as points of departure, the study was undertaken; to an extent they are conclusions which have gradually become clear as the study progressed. It seems important that they be placed in an introductory chapter because, in giving final form to the following treatment, they have served as guides for the direction of emphasis among the materials included. At the same time, it is hoped that the statements of characteristics have been made broad enough in their scope and that the selection of data has been made with sufficient impartiality that the reader will not feel that he is reading a biased account. The statements of important characteristics referred to are as follows:

1. *While provincial autonomy in education forms the basis of school organization in Canada, there is in fact a Canadian system of secondary schools unified by broadly similar aims, by similar problems, and by methods of administration which have much in common.*

Canada has nine provinces, each of which is autonomous in educational affairs. With some notable exceptions, books and reports on Canadian education have shown a tendency to deal with single provinces. The present study sets out to deal with the secondary education of the Dominion as a whole, not omitting to point out important provincial divergences, but at the same time attempting to show that likenesses between provinces are sufficiently striking to make it possible to speak of a Canadian system of secondary education, not in the strictly legal sense, but in the broad sense of aims and methods. In the following treatment the constitutional foundations of provincial autonomy in education are dealt with in Chapter II. From then on the presentation will consist not of a series of descriptions of single provincial systems, but rather of chapters each of which deals with an important feature of secondary education in general. This method of presentation, if it proves to be convincing, will afford good evidence of the essential similarity of secondary education throughout the Dominion.

2. *A high degree of centralization of control is characteristic of provincial administration of secondary schools.*

This characteristic of Canadian school administration has been repeatedly noted by writers on Canadian education and has also been the subject of adverse criticism. Chapter III, dealing with central and local authorities for education, gives a summary of the methods by which central control is exerted; Chapter VII carries the same theme into detail in a discussion of provincial examinations. In Chapter VIII, on the articulation of the secondary school with normal schools and universities, it will be observed that the position of provincial Departments of Education is fortified by the control of requirements for entrance to normal schools and by the close coöperation which exists between them and the universities in the conduct of matriculation examinations. In Chapter IX, on the training of teachers, the question of governmental control of teacher training is raised. Behind the discussion of the status of the high school principal in Chapter X there lies the question of giving more responsibility to this important local officer. Throughout the discussion of the curriculum, Chapter XI, the effect of provincial requirements upon the organization of high school time-tables will also be apparent.

3. *The Canadian secondary school system is in process of development under pioneering conditions of life.*

Because this was regarded as an outstanding characteristic of its schools, Canada was selected by Sandiford for inclusion in the book he has edited on *Comparative Education.* "Each country [says the editor in his introduction] [1] has been selected with a definite end in view . . . Canada as a country building up an educational system under pioneering conditions of development." Not only is the secondary system in process of being built up, but the process is taking place under pioneering conditions. Evidence for the first part of this statement will be found throughout the present study. Changes are almost everywhere in progress, changes which will have important effects upon the secondary schools. That this development is occurring under pioneer conditions can be seen most clearly from the data presented in Chapter IV, which show the large number of small high schools scattered over a wide expanse of sparsely settled country.

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[1] Sandiford, Peter (Ed.), Comparative Education, p. vi.

4. *The Canadian secondary school system is in process of democratization.*

Before the opening of the period covered by the present study, steps of supreme importance had been taken in the direction of extending the opportunities for secondary education. The secondary school had been superimposed upon the elementary school, making a single continuous system (Chapter VI), and fees had been generally abolished.[2] Thus the secondary school had been made democratic in its structure and intent. In the period under review the major problem confronting the secondary school in carrying the process of democratization forward is that of realizing in fact,

[2] Since the present study does not consider the financial support of secondary schools, a brief note at this point is necessary. Of 140 high schools representing 8 provinces which sent detailed information to the writer concerning their organization and administration (see Appendix C), 122 schools reported no fees to resident pupils, 5 schools failed to report on the question concerning fees, and 13 schools reported fees charged or to be charged to resident pupils. Of these 13 schools, 9 belong to the Protestant system of Quebec where school fees are permitted by law (The Education Act, R.S.Q., 1925, c. 133, ss. 257-63) and regularly charged. The other 4 are situated as follows: 2 in British Columbia, 1 in Manitoba, and 1 in Ontario. In British Columbia tuition fees are permissible by law for any or all pupils attending superior schools, high schools, technical schools, and night schools (The Public Schools Act, R.S.B.C., 1924, c. 226, s. 140; 1925, c. 46, s. 14.) One of the 12 high schools reporting from British Columbia charged fees to resident pupils in the commercial department only ($3 a month). A second from British Columbia reported that fees of $1 a month were to be instituted for resident pupils in 1924. In Manitoba school boards in cities, towns, and villages may charge tuition fees for pupils in grade XII (An Act to Amend "The Public Schools Act," 1926, s. 2). One school of the 5 reporting from Manitoba charged $10 a month to pupils in grade XII. This charge was made to resident pupils, if the principal's statement is being rightly interpreted. Thus in this school the amendment of 1926 appears to have been anticipated. The one school in Ontario which reported fees charged to resident pupils appears to have done so in error. The principal appears to have entered this charge against resident pupils by mistake for nonresidents. In Saskatchewan high school boards were (1925-26) given the power to charge $25 a year to resident pupils (The Secondary Education Act, 1925-26, c. 29, s. 5). None of the 6 schools reporting from Saskatchewan in 1923-1924 reported fees to resident pupils. This amendment in Saskatchewan marks an important retrogression from the principle of free secondary education.

through the provision of appropriate types of curricula or schools, the possibilities which were implied in the steps previously taken. Thus the rapid increase in the high school population will be shown in Chapter V; the difficulties involved in securing real rather than apparent continuity between the elementary and secondary grades will be considered in Chapter VI; the progress of secondary vocational education will be outlined in Chapter IV; and the problem of the organization of studies in consonance with the democratic trend will be considered in Chapter XI.

The problem of the study, therefore, in brief is this: Through a consecutive treatment of Canadian secondary education to bring into relief the important characteristics of the system, stating the principal facts on which they are based and the important problems which these facts raise.

The facts for this study have been collected over a period of several years. The main body of the data refers to the school year 1923-24. In some parts of the study data referring to the year 1925-26 have been used. An attempt has also been made to include in the text or footnotes references to more recent events of an important character. It would have been better if all the data could have been drawn from the year 1926-27, but this would have been difficult for a single hand to accomplish. In many cases, therefore, the facts of 1929 are different from those reported here. It is believed, however, that such differences do not invalidate any of the important conclusions drawn in this study.

CHAPTER II

PROVINCIAL AUTONOMY IN EDUCATION

Introduction

Canada has nine independent provincial school systems, each of which has power to direct its own educational destinies subject only to certain limited and clearly defined constitutional restrictions. This important fact might readily influence one who writes of Canadian schools to deal with each provincial system separately and to avoid the attempt to treat of Canadian education as a whole. To follow this plan, in the view of the present writer, would be a mistake. In this study common problems rather than the boundaries of provincial school systems will serve to coördinate the details. Nevertheless the administration of Canadian schools cannot be clearly understood without a preliminary study of the basis of provincial independence. The present chapter, therefore, will deal with the constitutional provision for provincial autonomy in education, the constitutional restrictions placed upon it, and the effect of these restrictions upon the government of schools.

Provincial Autonomy in Education the Dominant Principle

An examination of the constitutional provisions[1] for education in Canada shows that provincial autonomy is the corner stone of the Canadian school system. The opening words of subsection 93 of the British North America Act, "In and for each Province the Legislature may exclusively make Laws in relation to Education," repeated or made applicable in the constitutions of the three provinces, Manitoba, Saskatchewan, and Alberta, which came into the Union by separate acts, make it perfectly clear that each province in Canada has been free to develop its school system according to any pattern it might choose, subject only to the limitations which are presently to be discussed. These words also make clear where the final authority for education resides. From the outset the legal control of education was made a function of the provincial legislatures. It will not, therefore, be surprising to find, when in the next chapter the central authorities for education and their powers are discussed, that a high degree of centralization is characteristic of every provincial system.

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[1] By an Act of the Imperial Parliament, the British North America Act of 1867, Canada, which at that time consisted of Upper and Lower Canada (now Ontario and Quebec), Nova Scotia, and New Brunswick were united to form the Dominion of Canada. Provision was made by the same act for admitting to the Union British Columbia and Prince Edward Island "subject to the Provisions of this Act" when they should choose to join, a step which they took a few years later. For these six provinces the pertinent section of the British North America Act (Section VI, subsection 93) stands as the constitutional provision for education. The three remaining provinces, Manitoba, Saskatchewan, and Alberta, were admitted to the Union by acts of the Dominion Parliament, the Manitoba Act of 1870, the Saskatchewan Act of 1905, and the Alberta Act of 1905. The pertinent clauses of these three acts (Sections 22, 17, and 17, respectively) form the constitutional provisions for education in these three provinces. These constitutional provisions, which are brief, are quoted in full in Appendix A.

How significant for the future development of Canadian education was the precise statement of the supremacy of the provincial legislatures may readily be discerned from a comparison with the development of education in the United States. Students of American education are well aware that the Constitution of the United States is silent on the question of education.[2] The tenth amendment to the Constitution, ratified in 1791, which provides that "powers not delegated to the United States by the Constitution, nor prohibited to it by the States are reserved to the States respectively, or to the people," made the control of education one of the unmentioned powers which passed to the people of the different States.[3] An important difference, therefore, between the constitutional provisions for the state or provincial control of education as between the United States and Canada lies in the precision with which education was defined as a function of the federating units. In the Canadian constitution provincial control was set down in the plainest terms; in the American document it was reserved to the states by silence. "The history of our educational evolution, as so far described," says Professor Cubberley,[4] speaking of American educational development prior to about 1850, "must have clearly revealed to the reader how completely local the evolution of schools has been with us. Everywhere development has been from the community outward and upward, and not from the state downward." In Canada since the Union, at least, the opposite condition has obtained, initiative and control in educational affairs being recognized as a prerogative of the provincial governments.

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[2] Cubberley, Ellwood P., Public Education in the United States, p. 52.
[3] *Ibid.*, p. 54.
[4] *Ibid.*, p. 155.

That the right of each province to manage its own educational affairs is jealously guarded could be shown by numerous illustrations. One such instance will suffice to give point to the statement. When the Ministers and Deputy Ministers of Education of seven provinces assembled at Toronto in 1922 at the suggestion of the National Council of Education to consider the proposal of the National Council that a Canadian Bureau of Education be established under joint provincial control, the most striking feature of the whole proceedings[5] was the evident hesitancy of the delegates to commit themselves to a scheme which would in any way interfere with provincial autonomy. So strong was this feeling that a unanimous resolution was passed to the following effect:

> *Resolved* that this conference of Ministers and Deputy Ministers of Education representing the Provinces of Ontario, Quebec, Nova Scotia, Manitoba, Alberta, Saskatchewan, and British Columbia, declares its formal opposition to any intervention, either on the part of the Federal authorities or of private or public institutions in matters relating to educational administration in the various Provinces, unless such intervention is preceded by distinct agreements to that end with the Governments of the Provinces concerned; and it further declares that our National interests demand that education shall at all times remain directly and absolutely within the sole jurisdiction of the Provincial authorities.[6]

CONSTITUTIONAL LIMITATIONS UPON PROVINCIAL AUTONOMY

The only limitations placed upon provincial autonomy in education are found in the provision made for maintaining the rights and privileges of religious minorities with respect to dissentient, or, as they are now generally called, separate, schools. Paragraph (1) of subsection 93 of the British North America Act guarantees for six provinces, and the corresponding sections of the Manitoba, Saskatchewan, and Alberta Acts guarantee for the remaining three, that no provincial law shall prejudicially affect any right or privilege with respect to denominational schools which existed by law (in the case of Manitoba ''by law or practice''), at the time each province became a part of the Dominion.

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[5] Meeting of the Ministers and Deputy-Ministers of Education of the Dominion at Toronto, October, 1922. (A report of the proceedings of the meeting.)

[6] *Ibid.*, p. 44.

The first limitation upon exclusive provincial authority, then, is that rights with respect to denominational schools in existence when the various provinces entered the Union may not be abrogated. A second limitation is found in paragraph (3) of subsection 93, a clause which applies to all the provinces except Manitoba. This clause brings within the protection of constitutional guarantee not only the separate school systems which existed when the several provinces joined the Union but also any system of separate schools which is ''thereafter established by the Legislature of the Province.'' It is clear that under the constitution a province may originate or extend a separate system of schools; it may not, however, retrace its steps. Quebec is the conspicuous example of a province which has extended the scope of its separate school system. ''Although the British North America Act guaranteed only what the minority had in 1867, yet its rights and privileges have grown more since that date than previously.''[7] In brief, then, the constitutional limitations upon provincial autonomy may thus be described: that separate schools existing at the time any province entered the Union may not be abolished by the provincial legislature and that a system of separate schools which a province may establish subsequent to the Union is similarly protected.

So strong, however, is the feeling in Canada that the provinces shall have exclusive jurisdiction over their educational affairs that in the single instance which the history of education in Canada provides of a province which determined to go its own way in spite of constitutional limitations, the province did so with impunity. The Manitoba School Question is the *cause célèbre* of Canadian education and need not be enlarged upon here.[8] Suffice it to say that Manitoba abolished the system of separate schools guaranteed by the Manitoba Act, and that the Dominion Government could do no more than secure to the Roman Catholic minority some concessions in the practical application of the law. The point here to be made is that "the unquestionable rights which a minority has under the constitution are scantily guarded by the letter of the constitution. If a province deliberately and by express legislation determines on a given course, it is difficult, even to the point of danger, for the Dominion Government to interfere."[9]

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[7] Parmelee, G. W., in Canada and Its Provinces, Vol. 6, p. 474.

[8] An account of the Manitoba School Question may be found in Morant, R. L., The History of the Manitoba School System and the Issues of the Recent Controversy, in England, Education Department, Special Reports on Educational Subjects. London, 1897.

PRESENT STATUS OF SEPARATE SCHOOLS

It will be clear from the foregoing discussion that provinces will differ in their present provision for separate schools according to the law or practice obtaining on the dates of their admission to the Union and the various legislative enactments passed subsequently. Five of the nine provinces have school systems which are entirely nonsectarian in character. These are British Columbia,[10] Manitoba,[11] New Brunswick,[12] Nova Scotia,[13] and Prince Edward Island.[14] In the remaining four, separate school systems exist in varying degrees. One province, Quebec, has a system which is divided, beginning with the two committees of the Council of Public Instruction which control the Roman Catholic and Protestant systems.[15] One province, Alberta, has a system which offers no barrier to the extension of a system of separate schools through both the elementary and the secondary course,[16] though in fact only six separate Roman Catholic schools were reported by the Department of Education in 1923 as carrying on secondary studies.[17] Two provinces, Ontario and Saskatchewan, have systems in which there are both public and separate elementary schools; the high schools, however, operate under specific high school acts in which no provision is made for separate denominational high schools.[18]

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[9] Dyde, S. W., "The Canadian Constitution and the School Question," Queen's Quarterly Magazine, July, 1905, p. 66.

[10] The Public Schools Act, R.S.B.C., 1924, c. 226, s. 157. The provincial publications which contain the school laws to which reference is made here and subsequently in this study will be found in the Bibliography.

[11] The Public Schools Act, R.S.M., 1913, c. 165, s. 8.

[12] The Schools Act, 1922, s. 119.

[13] Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction of Nova Scotia, 1921, pp. 121 and 122, Regulations 27 and 28.

[14] The Public Schools Act, 1920, s. 97.

[15] The Education Act, R.S.Q., 1925, c. 133, s. 29.

[16] Establishment of separate school districts is provided for in The School Act, R.S.A., 1922, c. 51, ss. 22-26. Secondary education is provided for in The School Grants Act, R.S.A., 1922, c. 53, ss. 4-7; 1923, c. 37, ss. 2-5, by setting forth the amounts to be paid to schools having pupils in grades above the eighth. Separate school districts may qualify for this grant as well as any others.

[17] List of schools carrying on secondary studies supplied by the Department of Education of Alberta.

The organization of secondary education in the four separate school provinces is variously affected. It is most strongly affected in Quebec where Protestant high schools and Roman Catholic primary vocational schools[19] are under the control of separate local authorities and separate committees of the central authority. In Alberta, although separate school districts may organize high school courses, very few have done so. In Ontario and Saskatchewan the effect is more subtle. In these two provinces high schools are nondenominational; elementary schools are divided. Thus it may be seen that the point of division between elementary and secondary education is held constant, in part at least, by denominational feeling. Were the suggestion to be made that a new unit, the junior high school, should be introduced which would include the upper two years of the elementary course and the first year of the high school course, the proposal would naturally arouse religious antagonisms. To make the junior high school a nonsectarian unit would give Roman Catholics an opportunity to appeal to the guarantees of the British North America Acts. To include the junior high school in the divided portion of the system would mean an extension of denominationalism in the schools, a plan which, no doubt, would be strongly opposed.

SEPARATE SCHOOLS INTEGRAL PARTS OF PROVINCIAL SYSTEMS

In the four provinces having separate schools, the schools are under the protection of the constitution as elements in the provincial system established and controlled under provincial law. These schools are not to be confused with private parochial schools; they are state schools in every sense of the term. In the dual system of Quebec we find practically two provincial systems, each with its own separate organization, a natural result of the sharp division of race and religion. In Alberta, Ontario, and Saskatchewan, where race differences play a small part and where Protestantism is dominant, separate schools are a minor and integral part of a single provincial system. In these three provinces separate schools share equally with public schools in the grants from the provincial treasury [20] and are equally subject to the supervision of the central authority.[21]

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[18] In Ontario the public schools operate under The Public Schools Act, 1920; separate schools under The Separate Schools Act, R.S.O., 1914, c. 270; high schools under The High Schools Act, R.S.O., 1914, c. 268. For Saskatchewan the provisions governing the establishment and operation of separate schools are found in The School Act, R.S.S., 1920, c. 110, ss. 39-44. High schools are operated under The Secondary Education Act, R.S.S., 1920, c. 109.

[19] To a limited extent the equivalent of high schools in the other provinces.

CONSTITUTIONAL PROVISIONS GENERAL AND LIMITED

With the exception of the clauses which operate to protect the educational rights of religious minorities, constitutional provisions for education place no restrictions upon the development of the various provincial systems in any desired direction. Constitutional provisions are usually very difficult to alter. It is a great gain for flexibility in any school system that such provisions should be couched only in the most general terms. This advantage the Canadian provinces possess in a high degree.

SUMMARY

Provincial autonomy in education is the corner stone of the Canadian school system, and this independence is jealously guarded against encroachments from both federal and private sources. The supremacy of provincial legislatures specifically granted by the British North America Act has also, in all probability, contributed to the centralization of provincial systems. The sole limitation upon provincial autonomy is designed to protect the rights of religious minorities, both those in existence at the Union and those subsequently granted by provincial legislatures. As a result of the limitation, four provinces, British Columbia, New Brunswick, Nova Scotia, and Prince Edward Island, which had no systems of sectarian schools when they joined the Dominion or were elevated to provincial status, have none to-day. In spite of this limitation one province, Manitoba, abolished its denominational schools with impunity, and the provincial system is now nonsectarian. The same limitation has served to perpetuate in the four remaining provinces separate school systems of varying extent ranging from the dual system of Quebec to the practice of Ontario and Saskatchewan where separate schools are mainly confined to the elementary level. In these four provinces the effect upon the organization of secondary schools has been: in Quebec, to divide the systems completely along denominational lines; in Alberta to permit the existence, taken advantage of in a very few cases only, of secondary school courses under the management of separate school boards; in Ontario and Saskatchewan, to introduce a denominational factor which may tend to stabilize the point of division between elementary and secondary education. Separate schools, it should be noted, are not to be confused with private parochial schools; they are integral parts of their respective provincial systems. Finally, the limitations upon provincial autonomy which have been dealt with should not obscure the important fact that the provinces enjoy the greatest freedom from constitutional restrictions which might impede change.

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[20] Alberta and Saskatchewan, The Alberta Act, 1905, s. 17 (2) and the corresponding clause of the Saskatchewan Act. Ontario, The Separate Schools Act, R.S.O., 1914, c. 270, s. 13.

[21] Alberta and Saskatchewan, The School Act, R.S.A., 1922, c. 51, s. 26, and The School Act, R.S.S. 1920, c. 110, s. 44, respectively. Ontario, Department of Education, Regulations, Courses of Study, and Examinations of the Public and Separate Schools, Revised, 1915.

CHAPTER III

CENTRAL AND LOCAL AUTHORITIES FOR EDUCATION

Introduction

The foregoing chapter was concerned with the basic idea of provincial autonomy in education. The present chapter, which contains an account of the organization and powers of the central and local authorities, will emphasize a second fundamental feature of Canadian education; namely, the centralization of control in the hands of provincial authorities. While provincial autonomy in education is jealously guarded, the principle of freedom and variety finds little extension within a provincial system. The problem of devolution of authority within the provinces is thus sharply raised and that, too, as will be made clear in Chapter IV, under conditions of local organization of secondary education in rural areas particularly which make it difficult for the central authorities to delegate a large measure of responsibility.

Central Authorities for Education

The Organization of the Central Authorities

The legislature of each province has by statute created a central executive authority for education. While racial and religious differences have, in the Province of Quebec, combined to make the organization of the central authority in many respects exceptional, there are in the Dominion as a whole three important principles which have been widely applied by (1) bringing education into the system of responsible government, (2) supplementing governmental responsibility by means of educational councils, and (3) securing stability through permanent educational officials.

Responsible Government in Educational Affairs.—Those who are familiar with the political system in Canada will remember that the Dominion and the Provinces are administered by governments which are called responsible. That is to say, the chief executive officers who have control of the major fields of public business and who form the Cabinet or Executive Council are chosen by the Premier from the membership of the political party which has secured a majority in the elected House. It is the prevailing practice in Canada for educational affairs to be administered under the system of responsible government. In Alberta, Saskatchewan, Manitoba, and Ontario, education is under the jurisdiction of a Cabinet Minister. In British Columbia there is a Minister of Education and, in addition, all the members of the Executive Council are designated a Council of Public Instruction.

In the Maritime provinces the idea of responsible government for education is not so clear. There the chief executive officer for education is not a cabinet minister but an appointed official, and while in Nova Scotia the members of the Executive Council are designated as a Council of Public Instruction, it should be noted that in New Brunswick and Prince Edward Island there are added to the chief educational council several members who are chosen from outside the government of the day. In Quebec, the connection of educational administration with the provincial government is much weaker than in the other provinces, so much so that it forms an exception to the prevailing practice throughout the Dominion, as indeed it does in many educational matters. In Quebec there is no Minister of Education. The Council of Education is not composed of members of the Executive Council but of ex-officio and appointed members divided into two committees on the basis of religious denomination. The Council of Education is, indeed, subject to the orders and instructions of the Lieutenant-Governor-in-Council, but the lines of responsibility which lead in other provinces to the provincial government are obscured in Quebec by racial and religious influences.

Educational Councils.—Complementary to the idea of responsible government for education there is a distinct feeling that a Department of Education should have some way of drawing upon the advice and assistance of educational leaders in the province in framing educational policies. The most common form in which this feeling has been exemplified is an Advisory Council. Such a Council is found in Alberta, Saskatchewan, Manitoba,[1] and Nova Scotia.

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[1] On closer examination the so-called advisory board is found to be not an *advisory* board, at all, but a body having power to make regulations relative to

New Brunswick and Prince Edward Island, while they are without an Advisory Council, have added members from outside the government to the Council of Public Instruction, a different method of giving effect to the same principle. In Quebec, as has been seen, this principle has been carried so far as to obscure the prevailing practice of governmental responsibility. Ontario and British Columbia alone are without this feature of educational control. Ontario, indeed, had such a council and in 1915 abolished it, because, as Sandiford notes,[2] "the central executive officials believed that they could obtain more exact information and sounder advice from their own inspectors." "This," he continues, "would appear to be a misguided attitude, since the inspectors and teachers are bound to act as individuals, not as a body. A properly constituted advisory council could be utilized to give that impersonal, scientific, non-bureaucratic guidance so necessary for education in a democratic community."

Permanent Officials.—In addition to members of the government of the day who change with the changing fortunes of political parties and the members of educational councils who are appointed or elected for varying terms, each province has as an important part of the central executive authority one or more permanent educational officials. The number of these officials naturally varies with the complexity of the provincial system to be administered and the conception of the degree to which the central executive should be specialized. The chief official is frequently a Deputy-Minister of Education (where there is a Minister of Education), or a Superintendent of Education (usually when there is no Minister but a Council of Public Instruction at the head of the system), occa-

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many of the most important phases of school control which are exercised by the central authority. This board has power, for example, to make regulations concerning school plants, to authorize textbooks, to determine the qualification of teachers and inspectors, to determine standards for admission to high schools, to appoint examiners, to prescribe forms of religious exercise, to make regulations for the classification, organization, discipline, and government of schools, to determine to whom teachers' certificates shall be granted, and to cancel certificates (The Education Department Act, R.S.M., 1913, c. 58, s. 20). These regulations are made, moreover, subject to the approval neither of the Minister of Education nor of the Executive Council, but to that of the legislature (The Education Department Act, ss. 22 and 23). Manitoba exhibits a further extension of this plan of special boards in the Board of Reference which acts as a board of arbitration in disputes between teachers and trustees (The Education Department Act, s. 20A).

[2] Sandiford, Peter (Ed.), Comparative Education, pp. 350 and 351.

sionally both (e.g., British Columbia). The term permanent officials has been used advisedly. In 1924 an examination of provincial reports was made to discover the date on which the name of the then chief permanent official first appeared as holding the position of Deputy-Minister or Superintendent. Tracing back the names of nine men in eight provinces yielded the following results. The range of their tenure ran from 4 to 32 years, with 14 years as the median. This fact, the existence of a group of permanent educational officials, adds the third important element generally to be found in the constitution of the central executive authorities.

The Powers of the Central Authorities

The Canadian provinces exhibit a highly centralized form of school control. The present section will set forth the most important ways in which this control is exerted.

Centralized Executive Authority.—A reading of the powers and duties delegated by the various provincial legislatures to the central executive authorities indicates clearly that the intention is to create uniform systems of schools operating under centralized direction. In Alberta, for instance,

> The department shall have the control and management of all kindergarten schools, public and separate schools, normal schools, technical schools, commercial schools and teachers institutes, and of the education of deaf, deaf mute and blind persons.[3]

Such a clear statement of the inclusive power of the central executive is not always found. Without exception, however, departments of education are given the power to frame regulations for the government of schools in a variety of important aspects. As a result, each provincial department publishes regulations covering such phases of school administration as it has the right to regulate and binding upon the appropriate types of school. Ontario provides an example of a province where departmental regulations have assumed extensive proportions. In addition to these general powers of regulation important specific powers and duties are delegated to appropriate central officers or councils as, for instance, the granting of licenses to teach and the authorization of textbooks.

[3] The Department of Education Act, R.S.A., 1922, c. 16, s. 5.

Grants from Provincial Treasury.—It is further provided by law or regulation in all the provinces that schools which are to share in the legislative grant shall be conducted according to the school code and the regulations of the department of education. Further, in many of the provinces some particular injunction of the school law is singled out for especial emphasis by a provision that the school which disobeys may suffer reduction or cancellation of the legislative grant. In Ontario, for instance, the Minister may withhold the whole or any part of the legislative grant from a high school in which a teacher has used or has permitted to be used as a textbook any book except such as is authorized by the regulations.[4] In Manitoba an infraction of the law regarding religious teaching in the schools may be visited with an equally severe penalty,[5] while in New Brunswick failure to give the required instruction relative to the nature and effects of alcoholic drinks and narcotics is made sufficient cause for withholding the provincial or county grants wholly or in part.[6]

Under this general method of control fall also those grants widely used in Canada which give provincial money to districts in recognition of some special service or equipment which the districts have installed. Special courses of instruction, such as manual training and domestic science, school libraries, the conveyance of children to a consolidated school, are examples of such services which are frequently stimulated by grants in aid.

Prescribed Courses of Study and Authorized Textbooks.—It is a practice common to all the provincial systems for the central authority to prescribe the courses of study and to authorize the textbooks which the schools must use. There is, however, a growing tendency to allow local authorities a measure of responsibility which is well illustrated in the case of high schools by the most recent programme of studies issued by the Department of Education of Alberta.[7] This local responsibility may be assumed in three directions: (1) in deciding upon the scope of the programme to be undertaken in the local high school, a responsibility which necessitates a choice from among the curricula, normal entrance, matriculation, agricultural, commercial, etc., which the department has authorized; (2) in suggesting optional courses in subjects of local interest which may be given with the sanction of the department; (3) in deciding upon the sequence in which certain subjects are to be taken up which do not appear in every year of the high school curriculum. So far, however, there appears to be little disposition on the part of the central authorities to allow to local authorities any responsibility with regard to the subject matter to be included in the various courses.

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[4] The High Schools Act, R.S.O., 1914, c. 268, s. 53 (1).

[5] The Public Schools Act, R.S.M., 1913, c. 165, s. 234; C.A. c. 165, s. 119.

[6] The Schools Act, 1922, s. 104.

[7] Handbook for Secondary Schools, Alberta, 1925, p. 4.

Provincial Examinations.—The extent to which provincial examinations are found throughout the Dominion is indicated in detail in Chapter VII. It is sufficient here to note that this method of control by the central authorities occupies a prominent position in practically every province. The Roman Catholic system of Quebec, however, is exceptional in this respect inasmuch as the only provincial examinations conducted by the Roman Catholic central authority are those designed for candidates for teachers' licenses.[8]

Power to Grant and Cancel Teachers' Licenses and to Control Teacher-Training Institutions.—The central authorities alone have the power to grant and to cancel teachers' licenses. Furthermore, teachers in the public schools must hold a license to teach. The only exception to this practice is found in Quebec where ''ministers and members of either sex of a religious corporation constituted for educational purposes'' are exempt from the necessity of holding a teacher's diploma.[9] The Protestant Committee is empowered to abolish this exemption [10] in so far as it affects the Protestant system, and in fact has done so.[11] In the Roman Catholic system, however, in the year 1923-24 there were 7,672 persons teaching in the elementary and complementary schools of the Roman Catholic system who belonged to religious orders, as against 8,658 who did not.[12] Thus approximately 47 per cent of the teachers in these Catholic schools were eligible for exemption from the necessity of securing a provincial diploma. How many of them took advantage of the exemption there are no data available to show.

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[8] School Regulations of the Catholic Committee of the Council of Public Instruction of the Province of Quebec, 1922, Articles 77 and 79.

[9] The Education Act, R.S.Q., 1925, c. 133, s. 68.

[10] *Ibid.*

[11] Information from the Secretary of the Protestant Committee.

[12] Data taken from Report of the Superintendent of Public Instruction of the Province of Quebec, 1924-25, Table II, p. XXII.

The control and management of normal schools is regularly a function of the central authorities in all provinces. In Chapter IX it will be pointed out that in the case of the training of teachers, for high schools, where the training is carried on in the universities departmental control of teacher training is in some cases greatly reduced.

Duties and Powers of Local Authorities Specifically Defined.—The more closely one reads the school acts and regulations of the various provinces the more clearly is it apparent that in comparison with that of the central authority the discretionary and policy-forming power of the local authorities is narrowly confined. A Minister of Education in Alberta, for instance, is given the wide regulative powers which appear in the law already quoted in this chapter. The powers and duties of a local authority in the same province consist of a list of items, many of them very specific in character—as, for instance, the mandate to supply wholesome drinking water—while the more general powers it possesses are such as those concerned with the construction and maintenance of the physical plant, the selection and payment of teachers, and the care of the pupils' health. Without entering at this point into a discussion of the powers and duties of the local authorities, it is sufficient to indicate that the large balance of discretionary power standing to the account of the central authorities is an evidence of central control and a means of perpetuating it.

Comprehensive System of Inspection and Report.—It is evident that a central authority charged with the enforcement of the school law and competent itself to make regulations with respect to many important matters, where the law, moreover, makes considerable grants of money from the provincial treasury contingent upon the local authorities living up to the law and the regulations, must necessarily have machinery by which the acts of local authorities may be checked. In the Canadian provinces this machinery is supplied by the system of inspection and report. An inspector is primarily an examining officer, whatever other valuable functions he may fulfill by giving advice and encouragement to local authorities. This fact is clear from the Ontario High School Regulations in which the duties of a high school inspector are described as follows:[13]

> (1) Every High School Inspector, while officially visiting a school, shall have supreme authority in the school, and may direct teachers and pupils in regard to discipline or to any or all of the exercises of the school.
>
> (2) He shall make enquiry and examination, in such manner as he may think proper, into the qualifications and the efficiency of the staff, the adequacy and suitability of accommodations and equipment of the school, and all matters affecting the progress and the health and comfort of the pupils.
>
> (3) He shall report to the Minister, with his recommendations, the result of his enquiry and examination, within ten days after the close thereof. He shall also from time to time report any violation of the Schools Acts or of the Regulations in the case of the schools of which he is Inspector.

It is enjoined upon local authorities to report at least annually, usually on a form provided for the purpose, certain data respecting the conduct of their schools during the preceding school year. From data so secured and from the reports of inspectors and other special officers each department publishes annually a more or less detailed report of the condition of the provincial school system.

LOCAL AUTHORITIES FOR EDUCATION

The Organization of Local Authorities

The organization of local authorities for educational affairs in Canada is complicated. It is complicated in the first place by the differences between the several provincial systems, in the second place by the fact that local authorities are often created *ad hoc* and thus do not necessarily coincide with the regular divisions of the country for municipal government, in the third place by the division of local school administration in some provinces on denominational lines, and finally by the fact that elementary and secondary schools are sometimes administered by different local authorities. Richardson in his table[14] descriptive of the kinds and varieties of school boards in Canadian cities found it necessary to frame seven different categories in order to include all the varieties. Fortunately, however, the differences are not altogether arbitrary, and while many exceptions from the general practice must be noted, these exceptions are usually open to explanation. The following are the important characteristics of local authorities for education in the country as a whole.

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[13] Department of Education, Regulations of the High Schools and Collegiate Institutes, 1922, p. 14.

[14] Richardson, W. L., Administration of Schools in Canada, pp. 22 and 23.

Basic District System of Local Authorities.—The term *school district* is the most general term used throughout the Dominion for the local unit of school control. Ontario while using the term *district* for its high school units, calls its elementary school rural units *school sections*. Nova Scotia uses the term *school section* for all its local units and keeps the word *district* for a division of the province about the size of half a county over which presides a Board of School Commissioners whose principal duty is to divide the district into school sections. In Quebec a school district is not a unit for local school governments but a division, usually rural, of a *school municipality* (the local unit in Quebec), containing as a rule a single school.

Whatever the nomenclature used, the term *district system* has come to have a rather definite meaning, and it is the meaning rather than the name which is in mind in calling the district system basic throughout the Dominion. By a district system is meant one in which the local units of school administration are formed on the basis of a convenient grouping of the population. Thus a town or village becomes a school district, and in the countryside a school district is formed out of an area which has enough children to make a school and which is not too large for all the children to reach the school on foot. It is therefore apparent that under a district system will be found all kinds of districts ranging from the populous city district through the town and village to the country district three or four miles square with a one-room ungraded school. It is apparent, also, that the local school unit of administration will usually coincide with the local unit for municipal government in the urban centers, while in the rural districts it will be very much smaller. The chief characteristic of the district system is that it conforms to the natural distribution of population, whether this be best for educational purposes or not.

Modifications of the district system will be found mainly in rural areas where it is manifestly inadequate, particularly for high school purposes. Consolidation of rural schools for all purposes, both elementary and secondary, at the option of local districts is making varied progress. There exist permissive provisions for the union of school districts for high school purposes as, for instance, in Alberta[15] and British Columbia.[16] British Columbia has created District Municipality School Districts,[17] i.e., rural and suburban municipal areas in which a group of schools is administered by a single board of school trustees. Manitoba has a provision by which a rural municipality at its option may become a municipal school district, thus dissolving the small school districts which it contains.[18] Ontario is proposing the township as the unit of school control in rural areas.[19] In Quebec the school municipality may embrace an extent of territory and a school population equivalent to several of the school districts found in other provinces. Provisions such as these show that the untrammeled operation of the district system is being offset by efforts to increase the size of local units of control in rural areas in two ways mainly, either by voluntary union of districts or by making the rural school area coincident with some larger rural municipality.

Elementary and Secondary Education Generally Administered by the Same Local Authority.—The plan of putting both elementary and secondary education under the same local authority is followed by a majority of the provinces; namely, British Columbia, Alberta, Manitoba, Quebec,[20] New Brunswick, Nova Scotia, and Prince Edward Island.

There are, however, exceptions to this general plan which require some discussion: (1) There are permissive provisions in the law of several provinces for the union of school districts for high school purposes alone under a high school board drawn from the coöperating districts. (2) In Ontario and Saskatchewan, high schools are provided for under separate legislation and separate local boards are appointed or elected to manage them.

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[15] The School Act, R.S.A., 1922, c. 51, s. 56.

[16] The Public Schools Act, R.S.B.C., 1924, c. 226, s. 12 (*e*).

[17] *Ibid.*, s. 15 (*d*).

[18] The Public Schools Act, R.S.M., 1913, c. 165, s. 97; C.A., c. 165, s. 43; 1925, c. 42, s. 4.

[19] The Bill to Establish Township Boards of Trustees for Rural Schools: A letter from the Hon. G. H. Ferguson, Minister of Education, to those interested in Rural Education, Toronto, 1925.

[20] This statement does not refer to the Roman Catholic classical colleges.

The first of these is not widely enough employed to be significant. Even in Ontario and Saskatchewan where the separation of the local administration of elementary and secondary education may readily be explained by reference to the effects of the British North America Act (see Chapter II), the division is by no means complete. In Ontario the continuation schools, which are in fact small rural high schools, are managed by the same local boards as the elementary schools.[21] There is also a law under which elementary and secondary schools may be brought under the jurisdiction of a single board of education,[22] and it is significant that in 1924, 53 per cent of the high schools and collegiate institutes were being managed by such boards.[23] In Saskatchewan, while high schools and collegiate institutes are managed by separate boards, nevertheless in 1923 only 5,736 pupils out of a total of 13,545 high school pupils were enrolled in high schools and collegiate institutes, the remaining 7,809 were pursuing secondary studies in continuation classes established by the elementary school boards of their localities.[24]

Division of Local Authorities on Denominational Lines.—In some parts of the country local authorities for education are divided on denominational lines. The origin of this division has already been explained in Chapter II where the effects of Subsection 93 of the British North America Act were discussed. It has been shown also that this division exists in four of the nine provinces, applying to both the elementary and secondary schools in two of them (Quebec and Alberta), and being confined mainly to elementary schools in two (Ontario and Saskatchewan). In Quebec the division is fundamental. In the elementary system of Ontario the extent of the division is considerable, there being 698 Roman Catholic separate schools with 91,051 pupils and 5 Protestant separate schools with 461 pupils as against 6,329 public schools with 518,810 pupils.[25] In Alberta and Saskatchewan the effect is very slight. Saskatchewan, in 1924, had 4,625 school districts, of which only 25 were separate,[26] and in Alberta, in 1924, there were only 10 separate school districts,[27] and, in 1923, only 6 separate districts had organized secondary courses.[28] Division of local authorities on denominational lines is a considerable factor only in the Province of Quebec and in the elementary schools of Ontario. As far as the local administration of high schools is concerned the division outside of the Province of Quebec is practically negligible.

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[21] The Continuation Schools Act, R.S.O., 1914, c. 267, s. 3 (1).

[22] The Boards of Education Act, R.S.O., 1914, c. 269.

[23] Data derived from Report of the Minister of Education, Province of Ontario, 1924, p. 214.

[24] See Table 3, Chap. IV.

[25] Derived from data in Report of the Minister of Education, Province of Ontario, 1924, p. 59.

Local Elective Boards for the Control of Schools.—It is the practice in most of the provinces to elect the members of the local board of school trustees by popular vote. Exceptions to this plan are found (1) in the cities and incorporated towns of the Maritime Provinces, and (2) in the high school districts of Ontario.[29] In the Maritime Provinces the local boards are appointed in part by the Lieutenant-Governor in Council, in part by the council of the municipality.[30] In Ontario the high school trustees are appointed by the city, town, or county council, depending on the character of the municipality in which the high school district is situated. The public and separate school boards within the high school district may, under certain circumstances, appoint a member of the high school board.[31] Commenting on the situation in Nova Scotia, the authors of Bulletin No. 16 of the Carnegie Foundation for the Advancement of Teaching, remark:

> The Boards operate smoothly, and usually have an excellent personnel, but there is obviously no chance to reach the public with any educational question. The one means of fixing responsibility for good schools on the people, where it belongs, is lost. To educate the public is a secondary matter with a school board in Nova Scotia, because the public has no power over it.[32]

[26] Annual Report of the Department of Education of the Province of Saskatchewan, 1924, p. 23.

[27] Nineteenth Annual Report of the Department of Education of the Province of Alberta, 1924, p. 120.

[28] List supplied by the Department of Education.

[29] But where high schools and elementary schools operate under a Municipal Board of Education the high schools come under a board which is largely elected. (The Boards of Education Act, R.S.O., 1914, c. 269, s. 5.)

[30] Prince Edward Island, The Public School Act, 1920, s. 98; New Brunswick, The Schools Act, 1922, ss. 105 and 108; Nova Scotia, The Towns Incorporation Act, ss. 151 to 153.

[31] The High Schools Act, R.S.O., 1914, c. 268, ss. 12 to 21.

[32] The Carnegie Foundation for the Advancement of Teaching, Education in the Maritime Provinces of Canada, Bulletin No. 16, 1922, p. 7.

The Powers of the Local Authorities

Local Authorities Independent of Local Municipal Authorities.—In Canada local school authorities are independent of local municipal authorities both in their management of schools and in their financing of school costs. The powers of school boards are derived and their duties are prescribed by legislative enactment and by regulations of the central executive authority. It should be noted, however, that where the municipal authorities, as in the Maritime Provinces, appoint some of the members of the school board, influence upon the policies of the school board may be exerted indirectly. With respect to the financing of school costs, the municipal authorities are bound to levy a tax sufficient to meet the current expenses estimated by the school board, and in the case of extraordinary expenses such as might call for the issue of bonds the school board may refer the question direct to the people.

The authors of the British Columbia Survey, however, found in that province "a fairly large section of the community" which on grounds of economy advocated the subordination of the school board to the local council. The authors of the survey considered the proposal ill-advised. "An examination [they wrote] of the arguments for the extinction of school boards and their absorption by the councils failed to satisfy the Survey as to their validity. The paramount and vital duty of keeping the schools free from the petty foibles and intrigues of ward politics and politicians can scarcely be overemphasized."[33]

Limited Powers of the Local Authorities.—This fact has already been commented upon in connection with the discussion of the powers of the central authority. Where the duties of local authorities are stated specifically, there results a very long list of items which cannot easily be summarized for all provinces. The powers and duties of a high school board of trustees in Ontario, however, may be regarded as typical of the functions which are delegated to local boards throughout the country.[34] Here the paramount duty is to see that the schools are conducted "according to this Act and the Regulations." There are some general and important powers

[33] Province of British Columbia, Survey of the School System, 1925, p. 33.
[34] The High Schools Act, R.S.O., 1914, c. 268, ss. 24 to 26.

in connection with the provision and maintenance of adequate school accommodation, the discipline of pupils, the appointment, dismissal, and payment of teachers and other officers. In general, however, the duties and powers of the local authorities are prescribed so specifically that little initiative is left to the local school boards. Some specific authority for their acts should appear in the school law or the regulations of the central authority.

THE PROBLEM OF DECENTRALIZATION

The present chapter opens one of the most important problems of school administration in Canada; namely, the development of the best relations between local and central authorities. Referring to the high degree of centralization of educational control, Sandiford has said[35] that Canada "must agree to a large devolution of authority, or must stagnate in worthless efficiency." The solution appears to depend mainly upon the success with which three closely related problems can be attacked. The first of these is the enlargement of the local unit of school administration in rural areas. Many city school districts are already populous enough and sufficiently well organized to assume greater responsibilities. The rural districts, however, are too small to assume a considerable degree of responsibility and too small to contain within themselves a satisfactory system of elementary and secondary schools. The second consists in defining the relationship between central and local authorities in such a way as to give the maximum of local freedom without abrogating the right of the central government to guarantee a satisfactory system of schools. Such a relationship as has been set up in England by the Fisher Bill, under which the local authorities propose "schemes" of school organization for their areas and the central authority passes upon these schemes, represents in Reisner's opinion[36] "a highly satisfactory solution of the difficult problem involved." In the third place, as a satisfactory local unit becomes a reality and a satisfactory working relation between it and the central authority is achieved, there will open up a field in the local administration of schools which will be attractive to men of high caliber. Finding and training such men is a problem with which Canada will be increasingly concerned if decentralization is to go forward successfully.

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[35] *Op. cit.*, p. 434.

[36] Reisner, Edward H., Nationalism and Education Since 1789, p. 307.

SUMMARY

Centralization of control is a fundamental feature of provincial school systems. The central executive authorities in whose hands the general management of the schools is placed, while they differ among provinces in the details of organization, show certain similarities in general. The most important of these are: that education is organized as a department in a system of responsible governments, that educational councils or other similar means of drawing upon extra governmental advice are widely employed, and that stability is secured by means of permanent educational officials. Control by the central authorities is exerted through the wide powers of regulation placed in their hands by the legislatures, through grants from the provincial treasury contingent upon the schools obeying the law and the regulations, through province-wide authorization of textbooks and prescribed courses of study, through systems of provincial examinations, and through the granting and canceling of licenses to teach.

In the organization of local authorities the district system is basic with a tendency to enlarge the rural units either through voluntary unions or through provisions which will make the rural unit of local control coincident with some larger rural municipality. With some important exceptions, the general plan is to place the local management of both elementary and secondary schools under a single board of trustees elected by popular vote. Division of the local authorities along denominational lines is a fundamental feature of the school system of Quebec; in Ontario this division affects the elementary schools to a considerable degree, but outside of these two provinces its practical effects are negligible. Local authorities for education, while they are independent of local municipal authorities, depend in their conduct of school affairs largely upon the specific powers and duties delegated to them by the law and by the regulations of the central executive. Canada has been adversely criticized for the extent to which centralization of educational control has been carried. It has been suggested that the solution of this problem lies in making progress in three closely related directions: first, in the enlargement of the local unit of school administration in rural areas; second, in granting greater freedom and responsibility to local authorities; third, in the selection and training of men who will undertake the duties of local educational leadership.

CHAPTER IV

TYPES OF SCHOOLS ENROLLING HIGH SCHOOL PUPILS

Introduction

The two preceding chapters have laid the basis for an understanding of the general structure of the Canadian school system. The present chapter contains an account of the types of public schools in which secondary pupils are enrolled. Private secondary schools will not be considered; they play a minor rôle in the secondary education of the country as a whole, their pupils forming not quite four per cent of the public secondary pupils (see Chapter V) and their plan of studies being very similar to that of the public schools. Neither will any space be given here to discussing secondary education for girls as distinguished from that given to boys. There are a few public secondary schools in which the sexes are separate, but the number is practically negligible. There are, however, two points of view from which schools which enroll high school pupils may profitably be studied. The first involves a survey of the opportunities for secondary education found in various types of schools. These schools will be described with reference to their size, the character of their staff and equipment, the length of the high school course offered, and the degree to which they are interwoven with elementary education. This description will at the same time reveal serious inequalities in educational opportunity between the city child and the country child. These topics will be considered in Part I of the present chapter. The second important aspect, which will be dealt with in Part II, concerns the growing movement toward vocational education on the secondary level.

The first point of view is of great significance to the present study. In the introductory chapter the point was made that the Canadian educational system is democratic in intent. In the hope that no deserving child shall be debarred from something more than an elementary education, an opportunity for at least some degree of secondary education has been widely spread abroad, frequently reaching out into districts which can maintain no more than a one-room school. It was also noted in the introduction that the Canadian secondary system is in process of development under pioneer conditions of life. Older systems of education have their well-defined systems of distinct secondary institutions. Canada, too, has such schools in the larger centers of population, but, in addition, there exist hundreds of small schools, many of which are primarily elementary schools, each with its quota of secondary pupils. The task of the present chapter, therefore, is not confined to describing a system of separate secondary institutions but involves a survey of all the schools, large and small, in which secondary pupils are found. In Canada, a secondary pupil is not to be defined as a member of a distinct type of institution but rather as one who is pursuing a certain course of study. Secondary education in many parts of the country is thus so closely interwoven with elementary education that it is only in consequence of the careful investigations of the Dominion Bureau of Statistics that the full extent of secondary education has become accurately known.

It will be clear that under such a plan of secondary education there will be the greatest differences in the conditions under which high school pupils are working and the variety of opportunities open to them. The sharpest difference will be found to exist between urban and rural conditions. In all but the prescribed syllabus and textbooks the country pupil is often receiving his high school education under conditions which are far removed from those enjoyed by the city child. The discrepancy between urban and rural secondary education presents one of the most pressing problems which the country as a whole is facing.

In Part II there will be given a brief survey of the progress of vocational education. (It should be noted here that vocational education is given in many of the schools dealt with in Part I as well as through a variety of other agencies which are not easy to classify.) This type of secondary education is arising in response not only to changed social conditions but also to a new conception of equality of educational opportunity. In the words of the Royal Commission on Industrial Training and Technical Education, "Equality of opportunity, to be sincere and operative, must offer opportunities for education which will serve the pupils not all the same thing, but will serve them all alike in preparing them for the occupations they are to follow and the lives they are to lead.''[1]

PART I

OPPORTUNITIES FOR SECONDARY EDUCATION IN VARIOUS TYPES OF SCHOOLS

Classification of Schools

The following classification of schools which enroll high school pupils is based upon the size of the high school enrollment and upon the extent of the high school course offered. First are listed the separate secondary institutions, the largest schools with the longest course; midway stand the secondary classrooms in elementary school buildings; finally there are the little country schools where a few high school pupils are pursuing one or two years of high school work in the same room and under the same teacher as the children just beginning school. The Roman Catholic schools of Quebec have been added in a separate section.

A. SECONDARY INSTITUTIONS

1. The collegiate institutes and high schools of Ontario	These schools regularly offer a five-year course, a lower school course of two years, a middle school course of two years, and an upper school course of one year. The upper school course is postgraduate and may not be undertaken by a high school with fewer than three teachers. A collegiate institute is superior to a high school in specified details of staff and equipment. The details of the staff and equipment of a collegiate institute are given in the present chapter.
2. The day vocational schools of Ontario	These schools offer curricula of at least three years in length of one or more of the following kinds: industrial, home-making, art, technical, commercial, and agricultural. It should be noted that a vocational department may be included in a high school or collegiate institute.

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[1] Royal Commission on Industrial Training and Technical Education, Report of the Commissioners, Parts I-II, p. 22.

A. Secondary Institutions (*Continued*)

3. The collegiate institutes of Manitoba	The course offered is a four-year course, grades IX to XII, of which the final year is postgraduate. These schools must have at least four teachers, all of whom must be university graduates with additional professional training. At least $100 a year must be spent on library books and laboratory apparatus.
4. The collegiate institutes of Saskatchewan	The course offered is regularly of four years, grades IX to XII, the final year being postgraduate. Grade VIII is sometimes included in the collegiate building. To qualify as a collegiate institute, a school must have at least 125 pupils above grade VIII, four qualified teachers, and equipment of the following minimum value: chemical and physical apparatus, $400; a reference library, $300; maps and globes, $100.
5. The larger schools among:	
(*a*) The high schools of British Columbia	
(*b*) The high schools of Alberta	
(*c*) The county grammar schools of New Brunswick	One county grammar school may be established in each county. It is free to all qualified pupils resident in the county.
(*d*) The county academies and high schools of Nova Scotia	The county academy is the high school, generally in the shire town which is free to all qualified pupils in the county, for which it receives an extra provincial grant called the academy grant. A high school may be established by any local district.
	These larger schools in section A-5 regularly offer the four-year course, grades IX to XII, of which the final year is postgraduate. There are no regulations by which the school which is a separate secondary institution is differentiated from the one which is not. The minimum

A. SECONDARY INSTITUTIONS (*Continued*)

5. (*d*) *Continued*	requirements for these schools, clearly not intended to denote separate institutions, are given under section B-3 of this classification.
6. Some of the large Protestant high schools of Quebec	These schools regularly include four grades (VIII to XI). The final year is not postgraduate. This type of school appears to be favored among the large city schools recently established.
7. Prince of Wales College and Provincial Normal School, Prince Edward Island	This school is the single secondary institution of this small province. Its pupils are admitted on the successful completion of grade X. The course offered comprises grades XI and XII and a third year.

B. ONE OR MORE SECONDARY CLASSROOMS INCLUDED IN AN ELEMENTARY SCHOOL BUILDING

1. The majority of the Protestant high schools of Quebec	These schools follow the traditional definition of a high school in the Protestant system as one in which the eleven grades (I to XI) are taught. A few of these schools have large high school enrollments and are, in that respect, inappropriately classified here.
2. The majority of the continuation schools of Ontario	The continuation school in Ontario is the rural high school. At least one teacher must be engaged for his whole time in teaching high school studies.
3. The collegiate and high school departments of Manitoba	A collegiate department consists of three rooms devoted exclusively to high school work in an elementary school building of seven rooms at least. A high school department consists of two rooms devoted exclusively to high school work in an elementary school building of five rooms at least.
4. The smaller schools among:	
(*a*) The high schools of British Columbia	A high school may be established when there are at least fifteen qualified pupils.

B. ONE OR MORE SECONDARY CLASSROOMS INCLUDED IN AN ELEMENTARY SCHOOL BUILDING (*Continued*)

(*b*) The high schools of Alberta	These schools are called high schools by custom, not by law. Among the schools which may draw grants from the province for high school work the minimum requirements for the highest category are: one or more rooms exclusively for pupils above grade VIII and a daily average attendance of not less than fifteen high school pupils. These requirements may be considered those which would generally entitle a school to be called a high school.
(*c*) The county grammar schools of New Brunswick	The minimum requirement for a county grammar school is ten qualified pupils taking the regular studies in advance of grade VIII. This minimum holds for county grammar schools in villages. Grammar schools in towns and cities must meet additional requirements.
(*d*) The county academies and high schools of Nova Scotia	The county academy must meet the requirements of the Council of Public Instruction relative to staff and equipment. One academic teacher (i.e., a teacher with the highest qualifications) and fifteen qualified pupils appear to constitute the minimum. The equipment must be superior in character. The requirements for a high school are not specified, but there are many high schools superior to some of the county academies.
5. Many of the continuation classes of Saskatchewan	The minimum requirements for a continuation class in Saskatchewan are a room exclusively for pupils above grade VII and an average attendance of at least fifteen such pupils.
	The length of the course offered in the schools of section B is regularly a complete high school course. The number of pupils taking a postgraduate year is small, either because the regulations do not permit it or owing to the exigencies of the local situation.

C. A SENIOR CLASSROOM WHICH CONTAINS BOTH ELEMENTARY AND SECONDARY PUPILS IN A GRADED ELEMENTARY SCHOOL BUILDING

1. The intermediate schools of the Protestant system of Quebec	In these schools the first nine grades are taught. Grades VIII and IX constitute the intermediate department.
2. The superior schools of British Columbia	To rank as a superior school, there must be at least eight qualified high school pupils and a room set aside for pupils in grades VII, VIII, and IX.
3. The superior schools of New Brunswick	A superior school may be established for each 6000 inhabitants in a county. An additional superior school per county may then be established. To be ranked as superior, a school must have at least two rooms. The senior room must have no pupils below grade V, and there must be at least ten pupils in advance of grade VII. Some superior schools have a high school attendance large enough to occupy a separate classroom.
4. The intermediate departments of Manitoba	An intermediate department is the senior room in a three-room school. There must be at least ten qualified high school pupils in attendance.
5. The majority of the fifth forms of Ontario	The fifth forms in Ontario include the first two years of the high school course. A minimum of two qualified pupils is sufficient to secure the legislative grant to fifth forms. A fifth form may not be established in a high school or a continuation school district. Some fifth forms have a high school attendance large enough to occupy a separate classroom.
6. Many schools in Alberta, Saskatchewan, Nova Scotia, and Prince Edward Island which have no special names	

D. THE ONE-ROOM SCHOOL

These are ungraded schools in which elementary school and high school pupils occupy a single room and are taught by a single teacher. This type of school is not equally characteristic of all provinces. It is much in evidence in Alberta, Nova Scotia, and Prince Edward Island.

In this and the foregoing categories (sections C and D) with many exceptions only one or two years of the high school course are offered.

E. UNCLASSIFIED

1. The primary complementary schools of the Roman Catholic system of Quebec	The public school course of the Roman Catholic system is organized into a preparatory course of one year followed by an eight-year course. Schools which offer the seventh and eighth years are called primary complementary schools. It is not possible at present to ascertain the exact correspondence between the grading system of these schools and that employed by the other provinces. Probably the seventh and eighth years are roughly equivalent to the first two years of high school work with a vocational bias. The designations ''model schools'' and ''academies'' found in the footnotes to Table 3 are no longer used.
2. The Roman Catholic classical colleges	These schools, regarded as the secondary schools proper of Roman Catholic Quebec, are not under public control, although they draw support from public funds. In the classical course they carry their pupils to the baccalaureate degree through an eight-year course which appears to correspond approximately to the high school and college courses of the other provinces.

The Secondary Institution.—In every province of Canada there are to be found large distinctively secondary institutions. Taking 1923 figures for several provinces which give accurate data,[2] it is found, for example, that in 1923 British Columbia had four high schools with enrollments of 600 or more. Saskatchewan in the same year had three high schools with enrollments over 1,000. Manitoba's three largest schools enrolled 988, 1,079, and 1,121 pupils. Ontario had four collegiate institutes, each with more than 1,000 pupils. New Brunswick and Nova Scotia each had one school with between 600 and 700 pupils. The largest high school reported was the Central Technical School, Toronto, with 1,846 pupils. It is not, however, the policy of the largest cities to concentrate their high school pupils in one high school of very large size. Toronto, for instance, had, in 1923, eight large collegiate institutes, two large day vocational schools, and one high school. Vancouver in the same year had seven high schools, and Winnipeg had three.

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[2] The figures are taken from the reports of the various departments of education for the year 1923.

Generally speaking, however, the secondary institutions of Canada are not large. Ontario, the most populous of the provinces, with many years of experience in developing its high schools, has the most extensive system of secondary institutions in the Dominion. Table 1 gives a distribution of the Ontario collegiate institutions and high schools in 1923. The median enrollment of the 49 collegiate institutes is 415 and of the 126 high schools is 133. The median enrollment of both types is 165, and the school most commonly found has between 100 and 150 pupils.

TABLE 1

DISTRIBUTION OF COLLEGIATE INSTITUTES AND HIGH SCHOOLS OF ONTARIO ACCORDING TO THEIR ENROLLMENT IN 1922-23 *

Enrollment	No. of Collegiate Institutes	No. of High Schools	All Schools
1,000 upwards	4		4
900-999	3		3
800-899	2		2
700-799	5		5
600-699	2		2
500-599	3		3
450-499	5		5
400-449	4	3	7
350-399	6	2	8
300-349	1	0	1
250-299	4	2	6
200-249	8	11	19
150-199	2	29	31
100-149		48	48
75- 99		15	15
50- 74		11	11
25- 49		3	3
0- 24		2	2
Total	49	126	175
Median Enrollment	415	133	165

* Table compiled from data given in the Report of the Minister of Education, Province of Ontario, 1923, pp. 248-61.

The regulations governing the collegiate institutes of Ontario provide the most exacting requirements for any group of schools in the Dominion. With respect to staff they are as follows:

> In every Collegiate Institute the head teacher shall hold a Principal's certificate, and each of the Assistants shall be legally qualified for the position which he holds. There shall be on the staff at least five teachers, including one Specialist in Classics, one in Mathematics, one in Moderns and History, or in English, History, French, and German (or Spanish), and one in Science, with members holding Specialists' certificates in Art, Physical Culture, and, in the case of a school with a Commercial Department, in the Commercial subjects.[3]
>
> The equipment of a collegiate institute shall be suitable in character and adequate in amount and of the following minimum value:

Library	$600
Scientific apparatus	600
Biological specimens	100
Maps, charts, globes, etc.	75
Art models	100
Typewriters	200[4]

The other provinces also have secondary institutions fewer in number, but not markedly different in their enrollment distributions. The median-sized school of Manitoba's eleven collegiate institutes, for instance, had 229 pupils in 1924,[5] and the median of Saskatchewan's 21 high schools and collegiate institutes had 170 in 1924.[6] The requirements for a collegiate institute in Ontario, as has been noted, are high. A better idea of the requirements with which the great majority of secondary institutions enrolling between 100 and 200 pupils can comply may be found in the law and the regulations which govern the collegiate institutes of Saskatchewan. According to law there must be at least 125 pupils in advance of grade VIII in regular attendance, and the school must comply with the regulation of the department relative to staff and equipment.[7]

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[3] Department of Education, Regulations of the High Schools and Collegiate Institutes, 1922, p. 7. The principal's certificate is secured by (1) graduation from the university, (2) one year's professional training for high school teaching, and (3) three years' high school teaching experience. The specialist's certificate is secured as a rule by taking: (1) the Bachelor's degree with honors, (2) one year's professional training for high school teaching.

[4] *Ibid.*, p. 34.

[5] Derived from Report of the Department of Education, Province of Manitoba, 1924, p. 98.

[6] Derived from Annual Report of the Department of Education of the Province of Saskatchewan, 1924, p. 45.

The regulations of the department in these respects are as follows: [8]

1. In every collegiate institute there shall be at least four teachers continuously employed. The principal shall hold a valid collegiate certificate, two of the assistants valid high school certificates, and every additional assistant a valid first-class certificate.

2. At the time of organization of a collegiate institute it shall be provided with chemical and physical apparatus to the value of at least $400, a reference library to the value of $300, and maps and globes to the value of $100.

3. In order to obtain the legislative grant there shall be expended annually by the collegiate board $100 for scientific apparatus, $75 for a reference library, and $25 for maps and globes, until the maximum is reached.

4. In apportioning the legislative grant on scientific apparatus, reference books, maps and globes, the maximum recognized shall be as follows:

Apparatus—chemical, physical and biological	$750
Reference books suitable for high school purposes ..	500
Maps and globes, drawing and art models	150

Continuation Classes.—Separate secondary institutions by no means exhaust the available opportunities for a high school education. It has been found generally desirable to encourage the organization of one or more classrooms in an elementary school building which will be devoted exclusively to high school work.[9] The 181 continuation schools of Ontario with 8,777 pupils in 1922-23 represent a group the great majority of which are organized as continuation classes. Twenty-nine of British Columbia's 67 high schools which, in 1923, had enrollments of fewer than 50 each must belong to this class. Saskatchewan in the same year had 65 town schools other than high schools and collegiate institutes with an enrollment of 2,779 high school pupils organized in continuation classes, and Manitoba had 48 schools of this kind with 2,910 high school pupils. There are also many such schools in other provinces, but the number is not easy to ascertain.

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[7] The Secondary Education Act, R.S.S., 1920, c. 109, s. 7 (1) (*a*) and (*b*).

[8] Department of Education, Regulations and Recommendations Governing Programme of Courses of Study for Secondary Schools, 1926, p. 5. For the collegiate certificate are required: (1) the Bachelor's degree, (2) a year's professional training, and (3) at least 2 years of successful experience, one of which must have included teaching up to and including the subjects of grade XII. For the high school certificate are required: (1) the Bachelor's degree, and (2) a year's professional training. For the first-class certificate are required: (1) academic standing equivalent to the completion of the first year in the university, and (2) a year's professional training.

[9] The figures illustrating this type are taken from the Annual Survey of Education in Canada, 1923, p. 42, except those for British Columbia which are derived from the departmental report for 1923.

The regulations of the Province of Manitoba governing collegiate and high school departments represent an attempt to standardize the continuation classes in that province, and these regulations[10] are selected for quotation because of their definiteness.

HIGH SCHOOL DEPARTMENTS

1. Any school district may establish a High School Department with the consent of the Department of Education, subject to the following regulations:

   (*a*) Each school in which such High School Department may be established shall have in constant employment at least five teachers occupying separate rooms;
   (*b*) Two of these teachers shall devote their whole time to High School work;
   (*c*) The principal of the High School Department shall hold at least a First-Class Professional "Grade A" certificate, and the second teacher of said department shall hold at least a First-Class Professional "Grade B" certificate;
   (*d*) The teachers in charge of the Public Schools classes shall hold at least Second-Class Professional certificates;
   (*e*) There shall be at least twenty-five students in actual attendance in the High School Department.

2. High School Departments shall consist of pupils who have passed the regular Entrance Examinations.

3. The trustees shall spend at least seventy-five dollars per annum upon library books and laboratory apparatus for the High School Department.

COLLEGIATE DEPARTMENTS

1. Any school district may establish a Collegiate Department with the consent of the Department of Education, subject to the following regulations:

   (*a*) Each school in which such Collegiate Department may be established shall have in constant employment at least seven teachers occupying separate rooms;
   (*b*) Three of these teachers shall devote their whole time to High School work;
   (*c*) The Principal of each Collegiate Department shall be a graduate of a recognized university, and, in addition, shall hold a First-

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[10] Department of Education, Regulations for Secondary Schools, 1925. The regulations are quoted in part only.

Class Professional certificate, and each assistant shall hold a First-Class Professional certificate;

(*d*) The teachers in the Public School shall hold at least Second-Class Professional certificates;

(*e*) There shall be at least fifty students in actual attendance in the Collegiate Department.

2. Assistants may be employed in the teaching of special subjects, with such qualifications as may be approved by the Advisory Board.

3. Collegiate Departments shall consist of pupils who have passed the regular Entrance Examinations.

4. The trustees shall spend at least seventy-five dollars per annum upon library books and laboratory apparatus for the Collegiate Department.

It will be observed that the qualifications required of the teachers and the minimum value of the equipment are lowered for the smaller schools.

Senior Rooms.—There is no term generally used to cover the next smaller group of schools in which high school pupils are enrolled. The term ''senior room'' has been selected by the writer to describe a situation in which in a graded elementary school there are upper-grade elementary pupils and high school pupils studying together under a single teacher. It is not easy from available statistics to segregate the number of such schools found in each province. In Manitoba the regulations covering this type of school, called an intermediate department, are definite and the number of such schools is known. The regulations read in part as follows: [11]

INTERMEDIATE DEPARTMENTS

1. The trustees of any school district may establish an Intermediate Department with the consent of the Department of Education, subject to the following regulations:

(*a*) Each school in which such Intermediate Department is established shall have in constant employment at least three teachers occupying separate rooms;

(*b*) The teachers of the Intermediate Department shall hold a First-Class Professional certificate, and the other teachers shall hold at least Second-Class Professional certificates;

(*c*) There shall be at least ten students in actual attendance in the Intermediate Department.

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[11] Department of Education, Regulations for Secondary Schools, 1925.

2. Intermediate Departments shall consist of pupils who have passed the regular Entrance Examinations.

……

4. The trustees shall spend at least fifty dollars per annum upon library and laboratory apparatus for the Intermediate Department.

There were in Manitoba 105 such schools in 1922-23 with a total enrollment of 2,442 pupils. In British Columbia in 1923 there were 16 superior schools which belong to this group enrolling 181 pupils.[12] In Alberta, Saskatchewan, Nova Scotia, and elsewhere there are many such schools but their numbers cannot at present be determined from published sources.

One-Room Schools.—Most of the provinces do not officially recognize the ungraded school for the purpose of secondary education. This statement, however, does not apply to Alberta, Prince Edward Island, and Nova Scotia. In Alberta an additional grant of twenty-five cents per day is given to each district operating only one room, if instruction is given therein in grades above the eighth by the written authority of an inspector of schools.[13] In Nova Scotia it is enjoined upon every board of trustees to provide school privilege free of charge to all persons resident in the section between the ages of five and sixteen years,[14] and under this clause rural high school work in the ungraded country school has become a prominent feature of the Nova Scotia system. In the law of Prince Edward Island the duty of school trustees is couched in terms similar to the wording of the Nova Scotia law, and similar results have followed with respect to high school work in ungraded schools.

The statistics of these schools in Alberta are not complete. The total enrollment in 1923 was 1,343 high school pupils distributed 1,010 in grade IX, 288 in grade X, and 45 in grade XI.[15] Information concerning the number of schools, however, is not available. There is more complete information about the ungraded schools of Nova Scotia. Table 2 gives the facts.[16]

[12] The figures for Manitoba are from the Annual Survey of Education in Canada, 1923, p. 42; for British Columbia from the departmental report for 1923.

[13] The School Grants Act, R.S.A., 1922, c. 53, s. 4; 1923, c. 37, s. 2 (*a*).

[14] The Education Act, 1911, c. 2, s. 49 Am.

[15] Annual Survey of Education in Canada, 1923, p. 42.

[16] *Ibid.*, p. 42. The figure 1,087 is the sum of the rural schools doing high school work given in the footnote to the Survey's table. The total number of high school pupils given in the Survey has been altered to equal the sum of the pupils in the four grades.

TABLE 2

UNGRADED SCHOOLS OF NOVA SCOTIA ENROLLING HIGH SCHOOL PUPILS, 1922-23

Total No. of Rural * Schools	Rural Schools Enrolling High School Pupils		Distribution of Pupils in the High School Grades				Total No. of High School Pupils
	No.	Per Cent	IX	X	XI	XII	
1,445	1,087	75	2,195	1,027	236	2	3,460

* A "rural" school section in Nova Scotia is one in which only one regular teacher is employed. There were 1,445 rural sections in operation in 1922-23 (Annual Report of the Superintendent of Education, 1923, pp. VIII and IX).

In Prince Edward Island in 1922-23 there were 204 ungraded schools with a total of 690 high school pupils of whom 404 were in grade IX and 286 in grade X.[17] While other provinces do not officially recognize high school work in the one-room school, there is good reason to suppose that many of their ungraded schools have high school pupils in attendance. In Manitoba, for example, there were in 1922-23, nearly 400 high school pupils in one-room schools.[18]

As the distribution of pupils in the succeeding grades has shown, these ungraded schools carry their work to varying lengths. In Alberta the ungraded school confines itself mainly to grade IX of the high school course. In Prince Edward Island there are no pupils in advance of grade X. In Nova Scotia, while a considerable number are found in grade XI, and two pupils are actually taking postgraduate work, the great majority of pupils are concentrated in the first two years.

Elementary and Secondary Education Interwoven

It has already been said that it would be a mistake to think of secondary education in Canada as a system of secondary institutions only. It would also be a mistake to suppose that elementary and secondary education are divided into water-tight compartments. The facts which have been brought out in the foregoing classification have indicated that the situation in both these respects is quite otherwise. So important is a realization of this interweaving of elementary and secondary education even down to the one-room country school, if the present pioneer stage of secondary education in Canada is to be understood, that Table 3 has been prepared to

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[17] *Ibid.*, p. 42.

[18] Province of Manitoba, Report of the Educational Commission, p. 47.

TABLE 3

SUMMARY TABLE OF TYPES OF SCHOOLS ENROLLING HIGH SCHOOL PUPILS

(1) Province	(2) No. of high school pupils in separate secondary institutions	(3) No. of high school pupils in separate secondary classrooms, an unstated number being in separate secondary institutions	(4) No. of high school pupils in separate secondary classrooms in graded elementary school buildings	(5) No. of high school pupils in graded elementary school buildings, an unstated number being in separate secondary classrooms	(6) No. of high school pupils in one-room school buildings
British Columbia ..		9,220[5]		181[14]	
Alberta		5,790[6]		5,129[15]	1,343[25]
Saskatchewan	5,736[1]		2,779[11]	5,030[21]	
Manitoba	4,684[2]		2,910[12]	2,442[16] 1,519[22]	
Ontario	51,618[3]	8,777[7]		7,173[23]	
Quebec		11,700[8]		1,036[17]	
New Brunswick ...		2,045[9]		969[18] 253[24]	
Nova Scotia		6,209[10]		2,420[19]	3,459[26]
Prince Edward Island	347[4]		464[13]	237[20]	690[27]
Total	62,385	43,741	6,153	12,414 13,975	5,492
Total without Ontario	10,767	34,964	6,153	12,414 6,802	5,492
Total grouped	106,126	74%	38,034	26%	
Total grouped (without Ontario)	45,743	60%	30,861	40%	

NOTES ON TABLE 3

1. Enrollment of the high schools and collegiate institutes.
2. Enrollment of the collegiate institutes.
3. Enrollment of the collegiate institutes, high schools, and day vocational schools.
4. Enrollment of Prince of Wales College.
5. }
6. } Enrollment of the high schools.

NOTES ON TABLE 3 (*Continued*)

7. Enrollment of the continuation schools.

8. Enrollment of secondary pupils in the Roman Catholic academies and Protestant high schools.

9. Enrollment of the county grammar schools.

10. Enrollment of the county academies and high schools.

11. Enrollment of secondary pupils in town schools other than collegiate institutes and high schools.

12. Enrollment of the collegiate departments and high schools (high school departments).

13. Enrollment of secondary classrooms.

14. Enrollment of secondary pupils in superior schools.

15. Enrollment of secondary pupils in graded schools.

16. Enrollment of secondary pupils in intermediate schools (intermediate departments).

17. Enrollment of secondary pupils in the Roman Catholic model schools and Protestant intermediate schools.

18. Enrollment of secondary pupils in superior schools.

19. Enrollment of secondary pupils in village schools.

20. Enrollment of secondary pupils in graded schools other than (13).

21. Enrollment of secondary pupils in village and rural schools.

22. Enrollment of secondary pupils in schools doing high school work not already included. (Junior high schools are omitted.)

23. Enrollment of secondary pupils in fifth forms and in other schools doing high school work not already included.

24. Enrollment of secondary pupils in other schools doing high school work not already included.

25.
26. } Enrollment of secondary pupils in ungraded schools.
27.

The figures in this summary table are taken from the Annual Survey of Education in Canada, 1923, p. 42, except the secondary enrollment of the superior schools of British Columbia, which is derived from the Fifty-second Annual Report of the Public Schools of the Province of British Columbia, Part II.

give as close an approximation to the actual facts as can be determined. In this table a distribution of pupils is made for each province according to the type of school in which the pupils are found, the types being determined by the degree to which elementary and high school pupils are taught together.

Column (2) of the table contains the number of pupils in separate secondary institutions. The figures of column (3) represent pupils in separate secondary classrooms. There is no doubt that many of these pupils in column (3) are in separate secondary institutions—in the large high schools of British Columbia and Alberta, for example—but the exact number is at present unknown. Were the exact facts about pupils in column (3) available, these pupils would be divided between columns (2) and (4). The figures in column (4) represent the number of pupils who are in elementary school buildings, but are segregated into separate classrooms. The pupils represented by the figures in column (5) constitute a group about whom it cannot definitely be said whether they are in separate secondary classrooms or not. No doubt many of them are. They are placed in this column because they are found in graded elementary school buildings. The figures in column (6) represent secondary pupils in one-room schools where all grades from the first upwards are taught together. It will be observed that certain figures have been centered between columns (5) and (6). About these pupils it cannot definitely be said how many are in one-room schools and how many in graded elementary schools. Were the facts known exactly, they would be divided between columns (5) and (6).

At the foot of Table 3 will be found grouped totals including and excluding the secondary pupils of the Province of Ontario. Columns (2) and (3), which show the pupils who are for the most part in separate secondary institutions, are grouped in comparison with columns (4), (5), and (6), which show the number of secondary pupils in elementary schools. From what is known of the size of British Columbia high schools—9,220 pupils of column (3), of the size of the Ontario continuation schools—8,777 pupils of column (3), of the prevalent practice in Quebec of grouping all grades both elementary and secondary in the same building—11,700 pupils of column (3), of the size of the county academies and high schools of Nova Scotia and the grammar schools of New Brunswick—6,209 and 2,045 pupils of column (3), it is safe to say that column (3) includes a large number of pupils who are found in secondary departments of elementary school buildings. An estimate, therefore, which would be well within the limits would put the percentage of secondary pupils in elementary school buildings at not less than 33⅓ for the county as a whole and at not less than 50 for the eight provinces outside of Ontario.

Inequality of Educational Opportunity

It must already be apparent that great differences exist among the conditions under which pupils are receiving their high school education. It is only necessary to point to the Ontario Collegiate institute at the one extreme and the one-room country school at the other. These differences are found in the preparation of the teachers, the character of the equipment, and the range of the curriculum. The only factors which are constant in any one province are the textbooks and the provincial examinations. Extremes in these respects are most striking when the Dominion as a whole is taken as the unit. Yet within a single province they are widely separated. With respect to differences in the preparation of teachers, facts from the Province of Nova Scotia afford a striking instance.

TABLE 4

COMPARISON OF THE QUALIFICATIONS OF TEACHERS IN RURAL, VILLAGE, AND URBAN SCHOOLS IN NOVA SCOTIA, 1923 *

Kind of School	No. of Teachers	No. Holding Normal Diplomas	Per Cent Holding Normal Diplomas	No. Holding University Degrees	Per Cent Holding University Degrees
Rural	1,547	435	28	0	0
Village	559	334	60	22	4
Urban	1,131	857	76	147	13

* Annual Report of the Superintendent of Education for Nova Scotia, 1923, p. 4.

From Table 4 it may be seen that the quality of the teaching in the rural schools must be indifferent at best; only 28 per cent of the teachers hold a normal diploma, and not one holds a university degree. Nevertheless, as has already been shown, 75 per cent of these rural schools have high school pupils enrolled, and the number of these pupils forms nearly 29 per cent [19] of all the high school pupils in the province. The conditions in village and urban schools are obviously much better. Table 4 does not show the conditions in the high schools and county academies separately, but in the judgment of the representatives of the Carnegie Foundation the scholarship of the teachers in the larger schools they visited was ''apparently excellent and their instruction was notable for its clarity and force.'' [20]

With respect to equipment, the large schools of the country regularly have good libraries, well-equipped laboratories, and frequently extensive equipment for physical education; the ungraded school or the senior room must struggle along meagerly equipped or entirely lacking in these respects. The curriculum tends to become increasingly narrow as the school becomes smaller. The fact that municipalities of less than 5,000 population are generally unable to organize vocational courses at the secondary level (see Part II of this chapter) is but one instance of this tendency.

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[19] Out of a total of 12,088 high school pupils, 3,490 are enrolled in rural schools.

[20] The Carnegie Foundation for the Advancement of Teaching, Education in the Maritime Provinces of Canada, Bulletin No. 16, p. 10, 1922.

If the differences which have been cited represent no more than the varying degrees of educational shortsightedness or lethargy among communities equally able to have good schools, the condition would be serious enough. But the differences represent, in fact, a regrettable accompaniment of urban and rural life. The city child has better teaching, better equipment, a richer curriculum, than the country child. A conception of education which aspires to give wide opportunities for the acquisition of a high school education is struggling against a school district organization which pioneer conditions make it difficult to alter and which if adhered to will perpetuate the unjust discrimination against the country child.

Where secondary education is available to rural children it tends to be inferior in quality. Furthermore, in spite of generous permission to carry on secondary studies in small schools, the opportunity for obtaining a high school education is still much more readily accessible to the children of the cities, towns, and villages than it is to those who live in the open country. Table 5 gives a clear picture of this condition in Manitoba.

An examination of the table shows that in the rural districts

TABLE 5

INEQUALITIES IN DISTRIBUTION OF HIGH SCHOOL FACILITIES BETWEEN RURAL AND SETTLED AREAS AS SHOWN BY RATIO OF HIGH SCHOOL PUPILS TO ELEMENTARY SCHOOL PUPILS AND OTHER FACTORS, MANITOBA, 1923 *

Item	Rural Districts	Towns and Villages	Winnipeg	Three other Cities
Elementary school pupils	71,351	12,971	34,409	7,418
High school pupils	3,282	2,706	4,606	950
Nonresidents	685	499	192	100
Nonresidents paying fees	621	358	153	98
Ratio of high school pupils to elementary school pupils	1 to 21.9	1 to 4.8	1 to 7.4	1 to 7.8
Ratio of nonresident to resident high school pupils	1 to 3.3	1 to 5.4	1 to 24	1 to 9.5

* Province of Manitoba, Report of the Educational Commission, 1924, p. 47.

in 1923 there was only one high school pupil for every 21.9 pupils in the elementary schools, while in the towns and villages the ratio was as low as 1 to 4.8 and in the cities on the average (Winnipeg and three other cities taken together) 1 to 7.5. The table shows also that in the country and in the towns and villages, which draw their nonresident pupils from the surrounding country, the ratio of nonresident to resident high school pupils is highest, and these nonresident pupils are for the most part fee-paying pupils. In considering these facts it must be remembered that in Manitoba the three-room school is the smallest which is recognized by the Department as competent to carry on secondary studies and that the conditions here pictured are not entirely applicable to other provinces where the one- and two-room schools may enroll high school pupils.

Larger Units for Administration and Support in Rural Areas

Under the district system the evolution of the secondary school proceeds somewhat as follows: as the population of any region increases the one-room school is divided into departments and secondary pupils are gathered into a senior classroom and then later, when numbers warrant, into one or two separate rooms. With continued growth the secondary classrooms disengage themselves to become a small separate high school with several rooms. Better-qualified teachers and more adequate equipment are secured and a satisfactory high school training becomes possible. Meantime the advance of population into hitherto unsettled areas begins the process over again on the new frontiers.

If, however, this process of development is permitted to continue without interference there will always be a considerable number of high school pupils in newly settled areas receiving their training under unsatisfactory conditions, and further, in a country whose principal business is agriculture, considerable sections of the country will continue to be so thinly populated that a local school area of small extent cannot hope by its own efforts to put an adequate education within the reach of high school pupils who come from the homes within its boundaries. The apparent remedy for this situation lies in creating larger local units for administration and support of schools in rural areas. British Columbia with its District Municipality School Districts has already made a step in this direction. In Ontario, as has already been noted, the Minister has proposed a measure for increasing the local unit from the school section to the township. The Educational Commission which, in 1924, reported on the condition of schools in Manitoba clearly saw that mandatory legislation providing for larger units of administration in rural areas was a desirable step, although it hesitated to recommend immediate legislation to that effect until the people of the province had been prepared for its inception. The Commission gave its opinion [21]

> that as compulsory legislation inevitably followed permissive legislation in the establishment of free schools and compulsory attendance, so the adoption of a larger area for local school administration must be made compulsory if rural education is to be greatly improved.

Summary

In Part I of the present chapter a rapid survey of the types of schools in which high school pupils are found shows that while in the larger centers of population there exists a system of separate secondary institutions with a good standard of staff and equipment, there are also hundreds of schools primarily elementary in character in which secondary studies are carried on in continuation classes, in senior rooms, or even in the single room which the school provides. To such an extent is this true that a conservative estimate places the percentage of high school pupils who are receiving their education in graded and ungraded elementary schools at 33⅓ per cent for the country as a whole and at 50 per cent for the country excluding Ontario. This condition has been ascribed to the democratic spirit, which moves the authorities to put some kind of high school education within the reach of as many children as possible, operating in conjunction with the pioneer conditions of life under which the system is developing. The unfortunate feature of conditions as they now are is the inequality of opportunity which exists between the country child and the city child, either because of the meager secondary education in which the country school can provide or because, in spite of the general tendency to spread secondary education widely abroad, there are no high school facilities near at hand. The remedy for this situation, as is becoming increas-

[21] Province of Manitoba, Report of the Educational Commission, 1924. p. 95.

ingly apparent to educational leaders in Canada, is the enlargement of the rural areas of administration and support.

PART II

VOCATIONAL EDUCATION

Federal Stimulation: The Report of the Royal Commission

The present position of vocational education in Canada can best be considered by describing, in the first place, the means which the federal government has taken to stimulate this type of training. After seeking assurance from the provinces that they would not object on grounds of jurisdiction,[22] the federal government in 1910 appointed a Royal Commission to inquire into the "needs and present equipment of the Dominion as respects industrial training and technical education, and into the systems and methods of technical instruction obtaining in other countries." The commissioners after three years of study and travel reported in May, 1913. They declared that national prosperity and individual well-being rest upon intelligent and productive labor;[23] that Canada was "behind the times" in the facilities available for training looking to this end;[24] and that a policy of industrial training and technical education should be initiated under the control of the provinces with the assistance from the Dominion consisting both of money and expert counsel.[25] The commissioners envisaged vocational education in no narrow sense as a mere instrument for the service of industry:

> It becomes more and more evident that education must have a vocational aim and result if the industrial activities of the people are to be of benefit to all individuals and to the State which they constitute. It must be kept in mind that the first and chief object of industrial training and technical education must be the personal welfare of the individuals who are to participate in it; second, the prosperity and strength of the State; and, third, the advancement and improvement of industry as such, and that only as consistent with and subordinate to the other two.
>
> In the organization of this form of education, the attempt must be made to meet all the needs of all the people, with care that none shall be debased

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[22] Royal Commission on Industrial Training and Technical Education, Report of the Commissioners, Parts I-II, pp. viii to xii.

[23] *Ibid.,* Part I, p. 18.

[24] *Ibid.,* Part I, p. 15.

[25] *Ibid.,* Part I, pp. 30 and 31.

by the occupations for which they are prepared, and none shall be debarred from earning satisfaction, as well as satisfactory wages, from labour.[26]

In harmony with this broad conception they defined the aims of vocational education, not merely in terms of the specific skills to be acquired, but in such a way as to point to the well-rounded development of the prospective worker. The aims they set up are: [27]

1. The preservation of health and the vigour of life.
2. The formation of good habits.
3. The development of the sense of responsibility and duty.
4. *The preparation of the body, mind, and spirit for following some useful occupation.*
5. *The cultivation of the mental powers, the acquisition of knowledge, and the development of the scientific spirit with direct reference to the occupation.*
6. The promotion of good-will and desire and ability to coöperate with others.
7. The maintenance of standards and ideals.
8. As all-inclusive and ultimate, the perfecting of the human spirit, the improvement of the quality of life itself and the betterment of the conditions of labour, leisure, and living.

To put these aims into effect the commissioners recommended a "Dominion Development Policy," of which the fundamental principles were: [28]

1. It is important to adopt a plan which will secure the largest degree of *public confidence* and maintain the largest measure of *public interest and coöperation.*
2. It is important to adopt a plan which will preserve *Provincial control,* encourage *local initiative,* and develop *local responsibility.*
3. It is important that there should be a *large number of persons* representing Manufacturing Industries, Trades, Commerce, Transportation, Agriculture, Forestry, Mining, Fisheries, Housekeeping, and Education *ready to take the initiative* in local undertakings, and *able to coöperate* in making effective application to the needs of localities of financial grants and any other assistance. In the opinion of the Commission, a policy which would be applied wholly or mainly by directive authority from headquarters, leaving to local centres little initiative or responsibility, would not accomplish much for a long time.

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[26] Royal Commission on Industrial and Technical Education, Report of the Commissioners, Part I, p. 18.

[27] *Ibid.*, Part I, p. 19.

[28] *Ibid.*, Part I, pp. 30 and 31. Parts of principles 4 and 5 have been omitted.

4. It is important that there should be in each Province a *Central Body or Authority,* which could bring to bear on all proposals from local centres the wide knowledge and practical experience of *capable men and women* familiar with education and with industrial, agricultural, and housekeeping problems.

5. It is important to adopt a plan whereby the Dominion, the Provinces, the Localities, and Individuals will coöperate *and each contribute* in some well-considered and equitable proportion *to the cost* of development undertakings. A plan of organization which provides for the financial support from Communities being properly articulated with financial grants from Central Authorities would tend to bring about *efficiency and stability.*

6. It is important to adopt a plan which will insure that the *national interests* as well as the local points of view will be considered.

7. It is important that there should be a *Dominion Consultative Body,* through which the widest knowledge and experience could be put at the service of all the Provinces and thus be brought to bear on problems and undertakings of consequence to them all.

8. It is important that there should be a *Dominion Authority* competent to coöperate with Provincial authorities, to provide *expert counsel* to any Province which might not be adequately organized or staffed to render service in that respect to all localities and industries within its borders, and to promote *scientific industrial research* and the diffusion of knowledge resulting therefrom.

The Agricultural Instruction Act

In the same year in which the Commission made its report the Dominion Government, apparently without sufficient study of the Commission's findings, took steps to assist education in the field of agriculture.

The Director of Technical Education for Canada has outlined briefly the history of Dominion aid to agricultural education :

> In June, 1913, immediately following the report of the Commission, the federal government passed the Agricultural Instruction Act which provided for the carrying out of the Commission's recommendations in so far as financial assistance to agricultural education was concerned. The Act, however, did not provide for the administration or control of the grants in the manner recommended by the commission. The sum of ten million dollars ($10,000,000) was voted from the consolidated revenue fund to be given to the provinces during a ten-year period, "for the purpose of aiding and advancing the farming industry by instruction in agriculture." The expenditure of the grants by the provincial Departments of Agriculture was subject to annual agreements setting forth the amounts to be used for various purposes. The provinces were given considerable latitude in adjusting their expenditures to meet local conditions and were not required to share in the expenditures for which grants

were used.[29] Some of the provinces experienced difficulty in organizing sufficient educational work to absorb the grants, consequently the money was used for a great variety of activities of an agricultural nature. These included agricultural and veterinary training in schools and colleges, demonstration trains and exhibits, soil surveys, drainage, fertilization, weed control, live stock breeding, poultry, bee keeping, school fairs, boys' and girls' clubs, and homemaking classes. The Act expired in 1923 but was renewed for one year. An additional sum of $900,000 was granted to carry on the work so that the provinces could make the necessary adjustments to assume the financial burden of continuing the various activities without federal assistance. Unfortunately, much of the work has now been discontinued. Some of the work has been transferred to the provincial departments of education and the balance of that which remains is being carried on by the departments of agriculture.[30]

The Technical Education Act

In July, 1919, the Dominion Government enacted legislation [31] which provided for financial assistance to the provinces in connection with the development of educational facilities for other branches of industry. The Act may be summarized briefly thus:

1. Technical education is defined as ''any form of vocational, technical, or industrial education or instruction, approved by agreement between the Minister [32] and the government of any province as being necessary or desirable to aid in promoting industry and the mechanical trades and to increase the earning capacity, efficiency and productive power of those employed therein.''
2. The Act does not apply to any province until the provincial government has, by order in council, signified its desire to take advantage of it.
3. Ten million dollars are appropriated, payment to extend over ten years (ceasing after March 31, 1929).
4. Annual grants are allotted and paid quarterly to provinces on the following bases:
    (*a*) Ten thousand dollars to each province.
    (*b*) The remainder in proportion to respective provincial populations.

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[29] This sentence in the source contains an obvious typographical error which has been amended in the present quotation.

[30] Proceedings of the Interprovincial Conference on Vocational Education. Department of Labour, Canada, Bulletin No. 12, 1925, pp. 6 and 7.

[31] The Technical Education Act (Dominion).

[32] The Minister of Labour (Canada).

5. The grant payable to any province in any year shall not exceed the amount spent by the province on technical education in the same year.

6. The grants are payable subject to the following conditions:

   (*a*) The money shall be used for technical education according to the terms of Dominion-provincial agreements.
   (*b*) No part of the grant shall be used to meet expenditures incurred prior to July 1, 1919, for lands, buildings, or equipment.
   (*c*) Not more than twenty-five per cent of the annual grant shall be applied to the purchase of lands, buildings, and equipment.
   (*d*) An annual report shall be made by each province to the Minister of Labour on the work done in promoting technical education.
   (*e*) Every province shall present such evidence as may be required that grants are being expended according to the Act.

The notable features of the Act are:

1. The specific character of the education to be provided is not stated. This is left to the flexible scheme of annual Dominion-provincial agreement.

2. The Act does make it reasonably certain that grants will be used for approved purposes.

3. Provinces are called upon to share equally with the Dominion in the expense for technical education.

4. The Act is expected to terminate after a ten-year period.

The Technical Education Act has certain points of superiority over its predecessor, the Agricultural Instruction Act, which, in the opinion of the Director of Technical Education, will make for a more enduring impression upon the secondary school system of the Dominion.

Unlike the Agricultural Instruction Act, the money provided under the Technical Education Act is paid to the provincial governments, through the Departments of Education, only after they have earned the grants by expending provincial funds on certain types of secondary education. Quarterly federal grants reimburse each province to the extent of one-half of approved expenditures. Thus the federal government shares equally with each provincial government all expenditures for work coming within the provision of the Act. . . . The Technical Education Act follows more closely the general principles and recommendations of the Royal Commission of 1910-13, particularly in so far as the provincial governments are required to supervise and give financial assistance to the work aided by federal grants. Because of this provision, I am confident that the results will be more enduring than those which could be obtained under the provisions of the Agricultural Instruction Act.[33]

Types of Instruction Approved under the Technical Education Act

It is under these auspices, particularly of the Technical Education Act, that vocational education in Canada is now going forward. No requirements are made of any province as to the way in which the work is to be organized. The purpose of the Technical Education Act is to secure efficient vocational training for those who have passed the elementary school age and who are not eligible for courses of college grade. Within these ample limits, provinces may proceed as they please. As might well be expected, the greatest variety of provisions has been made for technical education throughout the Dominion. The Director of Technical Education has prepared a list of the types of instruction which are eligible for assistance from the federal government, and practically all of these are represented in one province or another. The list follows.

1. *Technical Courses* of secondary grade, conducted in technical schools, the purpose of which is to fit boys for entrance to engineering departments in universities and colleges.

[NOTE: Secondary grade includes all work in grades IX to XII.]

2. *Industrial Courses* of secondary grade, the purpose of which is to fit each student for entrance into a previously selected trade or skilled occupation, either as an apprentice or improver or skilled worker.

3. *Commercial Courses* of secondary grade, the purpose of which is to fit young people for earning a livelihood in commercial occupations such as bookkeeping, stenography, salesmanship, accounting, secretarial work, business administration, etc.

4. *Home Economics or Homemaking Courses* of secondary grade of at least two years' duration, the purpose of which is to fit girls for the duties and responsibilities of homemaking.

5. *Applied Arts Courses* of secondary grade, the purpose of which is to produce skilled workers in the various branches of applied art, including com-

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[33] Proceedings of the Interprovincial Conference on Vocational Education, Department of Labour, Canada, Bulletin No. 12, 1925, p. 7.

mercial design, illustrating, poster work, show-card writing, interior decorating, art metal work, etc.

6. *Prevocational Courses* of two or more years' duration commencing not earlier than grade VII, the purpose of which is to provide a variety of occupational experiences and information, while continuing the general training in English, mathematics, and science, to boys and girls who do not intend to enter universities, in order that they may wisely select, after careful guidance and supervision, the most suitable vocational training for their future lifework.

7. *Part-Time Vocational Courses* provided under compulsory school attendance laws and conducted during day working hours for the special benefit of young people who are employed.

8. *Continuation Courses* provided under compulsory school attendance laws, in which the training offered is directly related to the occupation needs of the students.

9. *Evening Courses* conducted for adults who are employed during the day, the purpose of which is to fit students for advancement in their occupation or to train them for other occupations.

[NOTE: Academic classes such as English, other languages, mathematics, history, etc., may be included only when correlated with practical work. Evening courses should provide for individual instruction wherever needed. A desirable size for classes is from six to twenty students per teacher.]

10. *Short-Term Courses and Special Industrial Courses.* Day short-term unit courses for industrial workers or special students in secondary schools, the contents of which are confined to practical work and related subjects of direct vocational value to the students.

11. *Apprenticeship Courses* (other than part-time classes). Organized training for indentured apprentices in any occupation, which training should be supervised by a specially appointed official in the employ of either the school board or an industrial corporation or an industrial organization responsible for apprenticeship in the industry.

12. *Foreman Training Courses.* Organized training in industry or school for the purpose of improving the efficiency of foremen or for training competent workmen for the position of foreman.

13. *Correspondence Courses* conducted by the provincial departments of education for the benefit of workers who are unable to attend the regular day or evening classes.

14. *Teacher-Training Courses.* Courses of various kinds (part-time, evening, short-term, summer school, etc.) which are conducted for the training and improvement of teachers and instructors in any branch of secondary vocational education.

No reference to students' ages or the percentage of time to be devoted to practical work is made in the above definitions, but it is felt that, with few possible exceptions, students should be at least 14 years of age, and that, in every course of study at least 50 per cent of the time should be devoted to practical work in shop or laboratory (including drawing).[34]

Extent of Vocational Education

With such a variety of types of instruction carried on by the several provinces in a variety of ways, it has so far been found practically impossible to collect and tabulate statistics which will accurately represent the status of secondary technical education throughout the Dominion. Two tables can, however, be presented: the first, Table 6, giving a statement of the number of pupils who are enrolled in courses which receive grants in aid under the Technical Education Act, and the second, Table 7, giving a statement of the municipalities of various sizes which have such courses established.

TABLE 6

ENROLLMENT OF PUPILS IN VOCATIONAL SCHOOLS AND COURSES, SCHOOL YEAR ENDING JUNE 30, 1925 *

Province	No. of Pupils			
	Day	Evening	Correspondence Department	Total
British Columbia	2,123	7,386	195	9,704
Alberta	1,800	2,430	238	4,468
Saskatchewan	938	991	...	1,929
Manitoba	1,479	3,579	...	5,058
Ontario	15,422	35,789	...	51,211
Quebec	1,742	6,963	...	8,705
New Brunswick	312	1,637	677	2,626
Nova Scotia	180	3,444	528	4,152
Prince Edward Island	141	30	...	171

* Adapted from Sixth Report of the Technical Education Branch of the Department of Labour, Canada, Table 3, p. 13.

Care must be taken in interpreting the enrollment figures of Table 6. These pupils in general are considered as secondary only in the sense that they are more than 13 or 14 years of age. Their educational status, particularly that of evening school pupils, would vary very widely. In the second place, day vocational pupils may be at school either full or part time. In Ontario, for instance, of the 15,422 day vocational pupils there were 3,769 part-time and special pupils whose hours of attendance in school were, on the average, 134 [35] for the year as compared with the hours of the full-time pupils which may be estimated as approximately 800. The other provinces show also this mixture of full-time and part-time pupils in day vocational classes with a considerable preponderance of full-time pupils. The pupils in evening vocational classes represent a heterogeneous group whose average hours in vocational classes during the year are quite few. In Prince Edward Island the evening pupils spent during the year an average of 64 [36] clock hours in vocational classes; in Manitoba the average clock hours were 17.[37] The other provinces are scattered between those extremes. There is no doubt of the value of such evening work for persons who cannot attend a day school, but the large enrollment is likely to be misleading unless the average time spent by each student is also considered.

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[34] Report of Department of Labour, Canada, 1923, pp. 76 and 77.

TABLE 7

NUMBER AND PERCENTAGE OF MUNICIPALITIES OF VARIOUS SIZES WHICH CONDUCTED VOCATIONAL CLASSES, 1925 *

Population Group	Total No. in Canada	Conducting Day Classes		Conducting Evening Classes	
		No.	Per Cent	No.	Per Cent
50,000 and over	11	11	100	11	100
10,000 to 50,000	44	25	57	37	84
5,000 to 10,000	53	9	17	29	55
1,000 to 5,000	365	12	3	37	10
Not given	...	8	..	42	..
Total	473	65		156	

* Adapted from Seventh Report of the Technical Education Branch of the Department of Labour, Canada, p. 7.

Table 7 shows the municipalities of various sizes which have established classes eligible for grants under the Technical Education Act. An inspection of the table reveals that every city of over

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[35] Derived from Sixth Report of the Technical Education Branch of the Department of Labour, Canada, p. 32.

[36] *Ibid.*, p. 15.

[37] *Ibid.*, p. 38.

50,000 population was served by both day and evening classes. Fifty-seven per cent of cities with populations from 10,000 to 50,000 had day classes, and 84 per cent had evening classes. The proportion of municipalities with less than 5,000 population which supported vocational classes is very small. Since between 63 and 64 per cent of the people of Canada live either in the open country or in places of less than 5,000 population,[38] it is clear that technical and industrial education is as yet available near home only to a minority of young people.

Both of these summary tables take on added meaning when compared with the situation that existed when the Technical Education Act went into force. Referring to the period between 1919 and 1925, the Director of Technical Education notes the following important evidences of growth:[39]

> [The enrollment and attendance tables] show a continued increase in the number of pupils in day classes, which is very encouraging. During the past six years the enrollment in these classes has increased from 8,512 to 24,137, a growth of 293 per cent. The number of municipalities conducting day classes has increased during the same period from 32 to 65, or 200 per cent. The increase in municipalities conducting evening classes has been approximately 500 per cent, the total now (1925) being 156. There has been a growth in correspondence class enrollment of 790 per cent during those six years, and last year 1,638 pupils received instruction through these departments.

Organization of Vocational Education

When the methods of organizing secondary vocational education in the various provinces are examined, two plans may readily be observed which frequently will be found operating together in any province. These are:

1. The plan by which secondary vocational education is integrated with the existing school system through the coöperation of central and local education authorities.

2. The plan by which various vocational schools and courses are operated by the central provincial authority directly. Under the first category would fall full-time day vocational schools and departments, evening classes, and part-time classes, managed by the

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[38] Seventh Report of the Technical Education Branch of the Department of Labour, Canada, p. 6.

[39] Sixth Report of the Technical Education Branch of the Department of Labour, Canada, p. 8.

local school board. Under the second would fall certain provincial schools as, for instance, the Provincial Institute of Technology and Art at Calgary, correspondence instruction, and itinerant instruction.

In the process of incorporating vocational education into the existing system there appear to be two main difficulties: (1) There is a decided tendency to assimilate vocational education to the prevailing academic type of course. (2) There is difficulty in securing adequate differentiations in a vocational direction where the local authority is small. On many occasions the Director of Technical Education has felt it necessary to call attention to the first tendency. A typical statement is as follows:[40]

> The outstanding weakness of vocational courses in Canada is the tendency to follow the established academic courses leading to university matriculation. In some schools the difference between the vocational and academic courses is scarcely noticeable except in the amount of time allotted to shopwork. The academic work is identical in both departments and similar shopwork is given to all students in the school. In a few cases the vocational students are required to attend school for longer hours than the others in order to provide time for their additional shopwork. Manifestly such work is not intended to provide a special type of training for industrial workers and cannot properly be called vocational education.

The high schools of Canada have become so much accustomed to looking to the universities for direction and to provincial examinations on examinable subjects for annual guidance that a new type of education with different affiliations is difficult to introduce. The problem is being met, in part at least, by associating with the local authority an advisory committee of men engaged in commerce and industry and by seeking to establish close relations with local industries. The difficulty of establishing vocational education where the local authority is small has been clearly shown in Table 7 of the present chapter. This condition forms an added argument for the enlargement of the local area of administration and support, and it also makes clear the preoccupation of the western provinces with correspondence instruction at their conference in Calgary in 1925.

Vocational schools managed by the central authority directly do not suffer from either of these difficulties. The school may confine itself exclusively to specific vocational training and it may be as highly differentiated as the industrial needs of the area served demand. Indeed it is not difficult for such a school to become too technical. The Provincial Institute of Technology and Art at Calgary for instance in 1924 gave the following courses:[41]

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[40] Report of the Department of Labour, Canada, 1923, p. 78.

1. Industrial and mechanical engineering
2. Industrial electricity
3. Motor mechanics
4. Farm construction and mechanics
5. Automotive electricity
6. Railway station agent duties
7. Dressmaking and millinery
8. Tractor engineering
9. Architectural drafting
10. Mechanical drafting
11. Survey drafting
12. Special tractor engineering
13. Special coal mining

These courses are planned in the main as two-year courses of eight months each, and in addition to the necessary shop practice ''instruction is given in business English, mathematics, physics and chemistry, drafting, and theory behind their different vocational practices.''[42] Such a type of instruction can hardly be criticized on the ground that it is too academic. There is no doubt that the students in this school would benefit by courses in English and the social studies which are not included in their curricula.

Probable Development of Vocational Education

It appears probable from the growth so far apparent that secondary vocational schools will develop along the following lines.

1. The composite high school. This will be a day school under the management of the local education authority offering a variety of curricula, not only those which lead to normal school and college, but also those which prepare for one or more of commerce, industry, agriculture, and homemaking. There has already been a considerable

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[41] Nineteenth Annual Report of the Department of Education of the Province of Alberta, 1924, p. 101.

[42] Proceedings of the Interprovincial Conference on Vocational Education, Department of Labour, Canada, Bulletin No. 12, 1925, p. 11.

development of such schools in Ontario, New Brunswick, and the West.

2. The vocational high school. This will be a day school under the management of the local education authority devoted to vocational education or to some special phase of it, for example, commerce. Such schools are at present most numerous in Ontario. They will probably be best suited to the larger cities.

3. Provincial vocational schools of secondary grade. These schools will be either managed directly by the central education authority or will receive from the province such extra funds as will enable them to serve the province as a whole.

4. Part-time courses given to employed adolescents by one or more of the kinds of schools already enumerated. Inasmuch as Ontario is the only province which provides definitely for compulsory part-time school attendance for adolescents, the development of this type of training lies mainly in the future.

5. Correspondence and itinerant instruction organized by the central authority. This type of work seems already to be meeting an important need, particularly where population is sparse and where other more regular and continuous methods of instruction are lacking.

6. Evening schools. These schools will no doubt hold an important place as ''opportunity'' schools for adults. They will also be of value to employed adolescents as long as part-time day instruction has not been regularly organized.

Summary

In contrast with the traditional secondary school whose status is defined by a centrally prescribed course of study, a new type of education is appearing, designed to serve those who do not expect to continue in school beyond 16 or 18 years of age. Its emphasis is upon the needs of the pupil and upon the work that he will do in the world rather than upon any defined body of content to be mastered. At present this vocational education, carried on under provincial control, is being stimulated by grants from the Dominion government. It appears to be making steady progress with the result that in 1925 about 25,000 pupils were enrolled in day vocational schools or departments. Present tendencies point to the development of composite high schools and vocational high schools under the management of local authorities as the most important institutions for secondary vocational training supplemented by provincial vocational schools of secondary grade. This movement toward differentiation is one of the most important signs of that democratizing of secondary education to which so much of the evidence adduced in this study points.

CHAPTER V

THE HIGH SCHOOL POPULATION

INTRODUCTION

The character of any school will be intimately affected by the character of the pupils who come within its doors. There must be great differences in character between an institution which is highly selective and one which opens its doors to all. In the former case the school may pursue aims which are limited by the particular capacities and destinies of a favored minority of young people. In the latter case it must eventually suit its aims and materials to the interests, capacities, and future callings of a group which is as wide as youth. When the high school population is changing rapidly from the first of these conditions in the direction of the second, the school naturally finds itself in a period of difficult readjustment. Having entered upon this process of change the high school population of Canada now includes a proportion of the available youth which is unprecedented except in the United States.

The present period of rapid expansion of the high school population is accompanied by a further difficulty. Many of the pupils no longer belong to those social levels in the community for whose children a complete high school education and subsequent entrance upon the university is regarded as a social and professional necessity. Such pupils may enter high school and then drop out again if their education does not appear to be satisfying any strong and rather immediate need. This, among other influences, has resulted in cumulative elimination from grade to grade through the high school course. Whether this condition is peculiar to a period of expansion and will right itself eventually when the new secondary school becomes stabilized, it is hard to predict. For the present at any rate the fact of elimination cannot be safely ignored.

The facts relative to the present numerical status of the high school population, the evidence of rapid growth, and an estimate of the amount of elimination found, together with a brief statement of some problems raised by these facts will occupy the present chapter.

THE NUMBER OF PUPILS IN HIGH SCHOOL GRADES AND THEIR RELATION TO POPULATION

In 1923 there were in high school grades in all the schools in Canada which are publicly controlled or draw support from public funds a total of 151,765 pupils.[1] The population of Canada according to the Sixth Decennial Census of 1921 was 8,788,483. For a close estimate of the ratio of high school pupils to the total population in 1923 the figure for the total population of the country must be increased somewhat. The population of Canada in the decade 1911-21 increased by 21.7 per cent. Assuming that the population of the country has continued to grow at the same rate, the percentage of increase for the two years 1921-23 would be about one-fifth of the growth of a decade, or roughly 4 per cent. The estimated population of the whole country in 1923, an estimate close enough for the present purpose, would be 9,140,022. The ratio of the public high school population to the total population in 1923 may therefore be considered as 1 to 60. So heavily does the large population of Quebec and its small high school enrollment count in this ratio, that if a calculation is made for 1923 of the ratio between the population of the remaining provinces and their high school enrollment the figures are found to be 1 to 51.

If there be added to the 151,765 pupils enrolled in secondary grades of schools under public control or drawing support from public funds the 5,508[2] pupils in secondary grades of private schools, a grand total of 157,273 is arrived at and the ratios of high school pupils to total population become, for the whole country, 1 to 58, and for the whole country without Quebec 1 to 49.

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[1] This figure is obtained from the Annual Survey of Education in Canada, 1923, p. 42, with the exception of the number in classical colleges of Quebec which is taken from the Report of the Superintendent of Public Instruction of the Province of Quebec, 1924-25. In order to arrive at an estimate of the proportion of pupils in the classical colleges who have standing comparable to the high school grades of the other provinces, the enrollment there given (9,225) for the year 1922-23 has been treated in the following manner: (1) The pupils in the primary course (553) have been deducted, and (2) one-third of the pupils in the classical course have been deducted. It is estimated from the detailed enrollment of 12 classical colleges given in the *Annuaire Général,* 1923-24, of the University of Montreal, p. 198, that about one-third of the pupils in the classical course are pursuing studies equivalent to the four undergraduate years in Arts of the non-French universities. Pupils in the third year of Prince of Wales College (57) are not included, and the pupils (621) in independent Roman Catholic Schools are also deducted in order to exclude pupils who are in schools which are not under public control or do not draw support from public funds. Otherwise, the total given represents the sum of the secondary enrollments on page 42 of the Survey.

Similar ratios calculated for the United States[3] a year earlier (1922) give a relation of 1 to 38 between the public high school population and the estimated total population of the country, and 1 to 35 between the sum of the public and private high school populations and the total population. In other words, the United States had, using the total populations of the two countries as comparative measures of the available high school pupils, about 58 per cent more of its young people in public high schools than had Canada as a whole and about 37 per cent more than Canada excluding Quebec. Considering both public and private high school pupils, the United States had about 66 per cent more than Canada as a whole and about 40 per cent more than Canada excluding Quebec. Comparisons with countries other than the United States will be made by means of a measure about to be calculated.

A second method of considering the high school population is to compare the number of pupils in high school with the number of pupils of high school age. Table 8 provides the basis for such a comparison for the census year 1921. The median age of pupils entering high school is 14.73 years.[4] Accordingly the 15-, 16-, and

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[2] Annual Survey of Education in Canada, 1923, p. 98. The 621 pupils in private schools of Quebec offering classical education are not included. There is no way at present of estimating how many of them are pursuing studies comparable to the secondary course of the other provinces.

[3] Figures for high school population are taken from Department of the Interior, Bureau of Education, Biennial Survey of Education, 1920-22, Vol. II, p. 5. The total population figures for 1922 are estimated from the census figures of 1910 and 1920.

[4] Median ages of pupils in successive grades on or about January 1 are as follows:

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Boys	7.45	8.80	9.96	10.87	11.85	12.88	13.57	14.39	15.05	15.95	(17.15)	(18.18)
Girls	7.33	8.63	9.69	10.62	11.57	12.55	13.31	14.31	15.06	16.00	(17.18)	(17.94)
Average ...	7.39	8.72	9.83	10.75	11.66	12.72	13.44	14.35	15.06	15.98	(17.17)	(18.06)

These ages are calculated from age-grade distributions given in Annual Survey of Education in Canada, 1923, p. 35. There are 627,602 boys and 620,005 girls included in these tables. The figures for grades XI and XII are in parentheses because for various reasons they cannot be considered satisfactory. Pupils in grade IX, when they entered high school four months before, were of the following ages: boys, 14.72; girls, 14.73; average, 14.73.

17-year-old groups have been selected to represent the pupils of high school age. The pupils in high school are those in grades IX, X, and XI. Pupils in grade XII, a postgraduate year, are not included because pupils of grade XII standing are divided between the postgraduate year in high school and the freshman year in college.

TABLE 8

PERCENTAGES OF CHILDREN OF HIGH SCHOOL AGE WHO WERE IN HIGH SCHOOL, FOR NINE PROVINCES IN 1921 OR AS OTHERWISE NOTED

Province	No. of Children 15, 16, 17 Years Old [1]	No. of Pupils in High School [2]	Per Cent
Prince Edward Island	5,420	1,459 [3]	30.29
Nova Scotia	32,092	10,695	33.33
New Brunswick	23,918	2,658	11.11
Quebec	150,765	19,330 [4]	12.82
Ontario	207,948 [5]	62,536 [6]	30.07
	(154,681) [7]	(62,536) [7]	(40.43) [7]
Manitoba	33,583	10,626	31.64
Saskatchewan	39,049	10,136	25.96
Alberta	29,814	10,206	34.23
British Columbia	23,000	8,944 [8]	(38.88)
Canada	545,589 [9]	136,590	25.04

1. The number of 15-, 16-, and 17-year-olds is taken from the Sixth Decennial Census, 1921.

2. The number of pupils in high school is taken from the various provincial reports for 1921 less pupils in grade XII (a postgraduate year), except as noted. Private school pupils are not included.

3. This figure is for 1923, 1921 figures not being available.

4. This figure is for 1923, 1921 figures not being available. The figure is an estimate of the pupils in Quebec comparable to grades IX, X, and XI in the other provinces based on the figures given in Annual Survey of Education in Canada, 1923, p. 42, with the same exceptions as are explained in the first footnote of this chapter.

5. This figure is the total of 15-, 16-, 17-, and 18-year-olds. The Ontario course is a four-year course.

6. These figures are for the four-year course; the fifth or postgraduate year has not been included.

7. The figures in parentheses are the 15-, 16-, 17-year-olds, the pupils in the four-year high school course, and the percentage which the latter are of the former. These figures have been inserted so that the achievement of Ontario in relation to its 15-, 16-, 17-year-old population may be compared with the other provinces.

8. This figure includes grade XII pupils. British Columbia did not report its high school enrollment by grades. The figure is therefore a little too large, and the percentage 38.88 has been put in parentheses as being a little too favorable.

9. This is the total of the 15-, 16-, 17-year-olds in 8 provinces and the 15-, 16-, 17-, 18-year-olds in Ontario.

Certain facts stand out clearly from the table. The first is that in the country as a whole in 1921, about 25 per cent of the pupils of high school age were receiving some schooling on the secondary level. When the Province of Quebec is omitted, the percentage comes very close to 30 (29.69). It is quite certain that these figures have improved considerably since 1921, for it is known that the high school enrollment has been increasing more rapidly than the total population of the country (see Diagram I, page 74). A second fact that becomes at once apparent is that two provinces, Quebec and New Brunswick, were at this date notably inferior to the others in the effectiveness of their school systems on the basis of the measure which is here being applied. It would be reasonable for the Protestant minority in Quebec to object that the figures presented for this province are heavily weighted by the great numerical superiority of the Roman Catholics. It is true that the figures do repre-

TABLE 9

RATIOS OF ENROLLMENT IN UPPER FOUR YEARS (HIGH SCHOOL) TO ESTIMATED FOUR-YEAR AGE POPULATION IN PER CENTS

(*After Byrne*)

Nation	Date	Ratio of Four-Year Enrollment to Four-Year Population
England and Wales	1915	3.9
Scotland	1914	9.1
Ireland	1914	4.3
France	1911	2.4
Belgium	1912	2.5
Germany	1910	1.7
Austria	1912	2.0
Hungary	1910	1.5
Switzerland	1912	2.2
Netherlands	1913	2.6
Denmark	1911	5.4
Norway	1910	4.5
Sweden	1914	1.4
Italy	1914	0.7
Spain	1910	1.1
Russia	1911	1.3
Japan	1912	1.8

sent in the main the state of Roman Catholic education. Whether the Protestant schools are serving their children any better than the Catholic schools, it is at present impossible to determine on the basis here used.

A very rough basis of comparison with European countries and Japan is furnished by the ratios computed by Byrne [5] between the enrollments in the upper four years of their secondary schools and the adolescent population of the four corresponding years. His results are quoted in Table 9. It should be noted that Byrne collected his data from secondary sources of information. It should be noted also that the dates of his European figures are six to eleven years earlier than those which have just been summarized for Canada. Furthermore, in Canada the high school population under consideration is a three-year and not a four-year group. In spite of these qualifications, there is no doubt that Canada has a proportion of its young people in high school which surpasses by a considerable amount that of its nearest European competitor.

THE GROWTH OF THE HIGH SCHOOL POPULATION

Observers of educational progress in Canada of late years have pointed to the remarkable growth of the high school enrollment. No analysis of this growth, however, in its relation to the growth of population in the country as a whole and to the growth of the elementary enrollment has hitherto been made. Enrollment figures published by the Dominion Bureau of Statistics supplemented by the reports of Provincial Departments of Education make it possible to present the relation between the growth of the high school population on the one hand and the elementary school population and the total population on the other. Diagram I presents these relationships in graphic form over the period from 1891 to 1923. The raw figures on which the graph is based and the sources from which they have been drawn may be found in Appendix B. The high school and elementary school enrollments have been calculated at five-year intervals except the interval 1916-23. The total population of Canada has been taken at the decennial census years from 1891 to 1921.

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[5] Byrne, Lee, How Much Education Have the American People? School and Society, Vol. XV, pp. 289-92 and 327-31.

In order to reduce the three lines of growth to a comparable basis, an index figure has been calculated [6] by dividing the enrollment and population figures at each five- or ten-year interval, as the case may be, by the means of these enrollment and population figures respectively. The index figures, then, in each case represent a percentage relation between the enrollment or population at each time interval and the means of the enrollment or population figures over the whole period under investigation.

It will be observed that the elementary school enrollment and the total population of the Dominion run along very close together over the whole thirty-two year period, an increase in total population bringing with it a closely similar increase in the numbers in the elementary school. The line which represents the high school enrollment, however, follows quite a different course. Running roughly parallel to the elementary enrollment and the total population over the first twenty-five years, it sharply alters its course about the year 1916, and, ascending quickly, cuts across the other lines, diverging rapidly from the population and elementary lines up to the close of the period under investigation. It is scarcely possible that this sudden rise of the high school population is a temporary phenomenon. Probably, almost certainly, the second decade of the present century will come to be recognized as an important turning point in the history of the Canadian high school.

Numerically, the increases which the graph represents are as follows: for the elementary school population an increase between 1891 and 1923 of 94 per cent; for the total population an increase between 1891 and 1921 of 82 per cent; and for the high school enrollment an increase between 1891 and 1923 of 234 per cent.

A situation very similar in its general trend is disclosed by a comparison of the same populations made for the United States by Counts. He shows that between 1870 and 1920, the elementary school population and the total population increased at almost identical rates. The high school population, however, began to rise more rapidly than the others about 1890, and with even greater rapidity about 1905 when it cut through the other two lines. From that date it has continued its steep ascent, diverging from the

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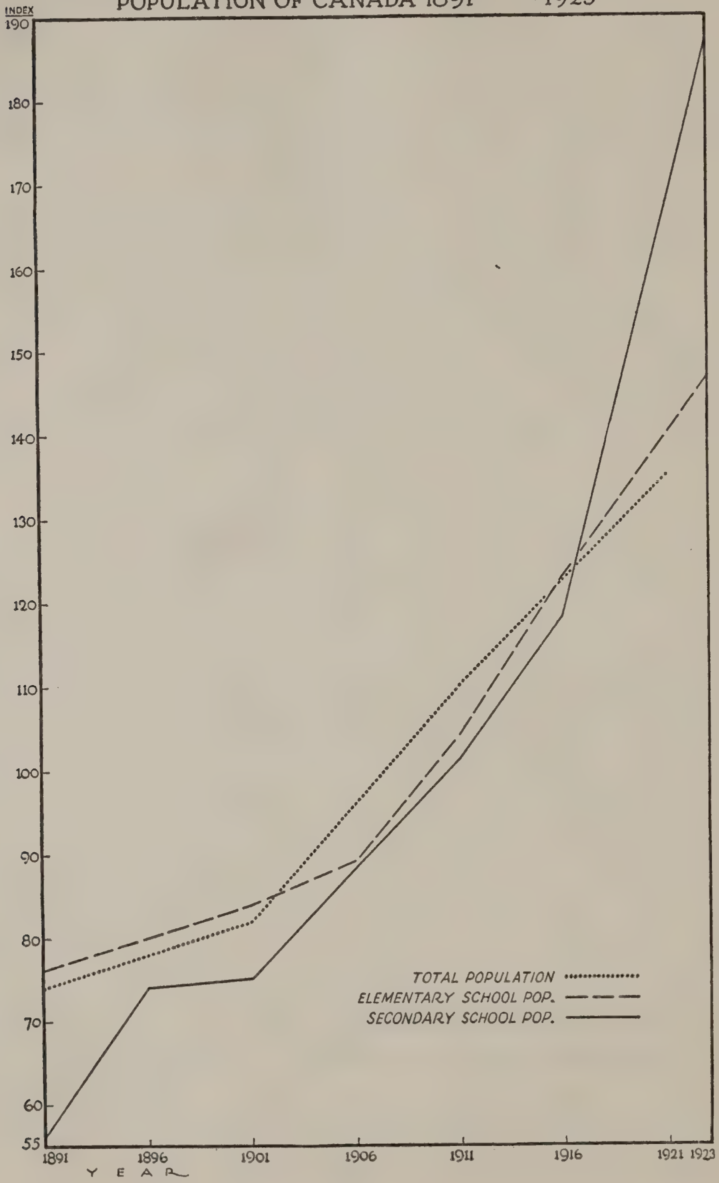
[6] For this method, used by Counts in presenting similar data, see Counts, G. S., The Selective Character of American Secondary Education, p. 2.

DIAGRAM 1

GROWTH OF THE HIGH SCHOOL POPULATION IN COMPARISON WITH THE ELEMENTARY SCHOOL POPULATION AND THE TOTAL POPULATION OF CANADA 1891 - - - 1923



elementary school enrollment and the total population even more sharply than does the high school line in Diagram I. The main difference between the American and Canadian situations is that the phenomenal increase in the high school enrollment occurred 15 to 20 years earlier in the United States than in Canada and has thus had more opportunity to make its influence felt.

THE CAUSES OF GROWTH

It is impossible in this discussion to do more than suggest some of the causes which have brought about this rapid increase in the Canadian high school enrollment. Some of them are tangible enough. Among these may be included the Adolescent Attendance Act of 1919 in Ontario which in urban municipalities raised the compulsory age limit from 14 to 16 years;[7] the Technical Education

[7] The status of the Adolescent Attendance Act of 1919 is now (March, 1928) as follows:

Section 3 made full-time attendance compulsory for adolescents between 14 and 16 years of age with the following exceptions: (1) those physically unable to attend; (2) those employed on the authority of a home permit or an employment certificate granted by a school attendance officer; (3) those having attained university matriculation or its equivalent.

Section 3 came into effect on September 1, 1921, but in 1923 an amendment was passed exempting from its provisions adolescents whose parents or guardians reside in a rural school section and whose services are required in the household or on the farm of their parents or guardians. Adolescents exempt under this section are not required to secure home permits.

Section 6 provided that adolescents who received home permits or employment certificates under Section 3 must attend part-time courses for at least 400 hours a year whenever such part-time courses were established in the municipalities in which they were employed.

Section 9 provided that every urban municipality with a population of 5,000 and over must establish and maintain part-time courses for adolescents between 14 and 18 years of age. In other municipalities and school sections the establishment of such courses was left optional. Section 9 came into effect on September 1, 1922.

Section 7 provided that adolescents between 16 and 18 years of age must attend part-time courses for at least 300 hours a year when the municipality in which they live had established such courses, with the following exceptions: (1) those physically unable to attend; (2) those having attained university matriculation or its equivalent; (3) those in full-time attendance at an approved school; (4) those having been under efficient full-time instruction up to 16. Section 7 came into effect on September 1, 1925.

It should be noted that the full effects of the Adolescent Attendance Act of 1919 had not been felt in the years covered by Diagram I. It may also be pointed out here that school attendance of all adolescents either full- or part-time up to 16 or 18, as the case may be is mandatory only in municipalities with 5,000 population or more, although in smaller places the pupil must attend when the municipality has managed to establish the appropriate courses. This fact illustrates the difficulty of making secondary education for all possible in the less populous areas. The information relative to the steps by which the act has been brought into operation was furnished by the Provincial School Attendance Officer of Ontario.

Act passed by the Dominion Government in 1919 also, with the stimulus to technical education on the secondary level which the money disbursed to the provinces under its provisions, has brought about; and a third cause, in no way spectacular, but probably quite as influential as any others consisting in the constant effort on the part of both central and local authorities to increase the regularity of attendance of pupils in the elementary school, thereby bringing constantly increasing numbers of children to the doors of the high school. There is good evidence of the effectiveness of these efforts. In the decade 1911 to 1921 the improvement in elementary school attendance was as follows: [8]

	1911	1921
Percentage of the population 7-14 years attending school for any period	79.8	88.6
Percentage of the population 7-14 years attending 7-9 months	69.5	79.7
Percentage of those at school 7-14 years attending 7-9 months	87.2	90.0

The item showing the greatest increase is the proportion attending 7 to 9 months, or what may be considered an adequate school year. The difference in this item for the decade which represents more than a fifteen per cent increase over the figure for 1911 has had the effect, according to the estimate,[9] of the statistician of the Education Division of the Dominion Bureau of Statistics, of bringing the average child nearer high school entrance by between one and two grades.

A less tangible cause, but one which is no doubt very real, is the growing conviction on the part of the public generally that effective citizenship is not to be attained by boys and girls who have no more than an elementary education. The governing factor in the increase in the high school enrollment in the view of the Minister of Education for Ontario is

> the general sentiment of the community that success in life calls for more educational preparation and that an elementary training is not in itself sufficient to equip a boy or girl for any calling or career.[10]

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[8] Annual Survey of Education in Canada, 1923, p. x.

[9] Annual Survey of Education in Canada, 1923, p. xi.

[10] Report of the Minister of Education, Province of Ontario, 1924, p. x.

ELIMINATION FROM SUCCESSIVE GRADES

Hitherto high school pupils have been discussed without regard for the amount of high school education they receive. When, for instance, it was said that 1 in 58 of the total population was in high school in 1923, there was no intention of suggesting that 1 in 58 receives a complete high school education. It was also said that, in 1921, 25 per cent of the children of high school age were in high school. Unfortunately, only a regrettably small proportion of these pupils finish the high school course.

Any distribution of pupils by grades at once shows that from the upper years of the elementary school to the close of the high school each grade regularly contains fewer pupils than the one preceding it. The plan which at first suggests itself for exhibiting the amount of elimination from grade to grade is to calculate from a grade distribution the percentage which each grade from II to XII is of grade I on the assumption that the pupils in grade I represent fairly accurately the annual group of beginners. Such an assumption, however, is quite unjustifiable. An examination of provincial grade distributions for any year will show that the enrollment in grade I is regularly much larger than the enrollment in grade II, sometimes more than twice as large as was the case in Saskatchewan in 1923.[11] The reason for the difference is not, of course, that a large number of pupils leave school at the close of grade I but that there are causes at work which create a piling up of pupils in the first grade. These causes, most vigorously operative in rural areas, have been analyzed by the Chief of Education Statistics at Ottawa. There are, in reality, he points, out, three separate groups of beginners in grade I:

> Children of 5 and 6 years of age begin to go to school as soon as winter is over, remaining, that is to say, for a period of two or three months. They learn very little before the summer holidays and most of them have retained nothing of what they did learn at the beginning of school in the autumn: thus they reënter grade I along with a new group of beginners. With the return of winter these little children will doubtless remain at home until spring, when they reappear in grade I accompanied by a third beginning group.[12]

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[11] Annual Survey of Education in Canada, 1923, p. 18.

[12] *Aperçu Historique et Statistique sur l'Instruction Publique au Canada*, p. 39. (Translation)

TABLE 10

ELIMINATION IN THE SCHOOLS OF ALBERTA, SASKATCHEWAN, MANITOBA, AND NOVA SCOTIA, 1923, SHOWING PERCENTAGES OF THE ESTIMATED ENTERING GROUP REMAINING IN SUCCESSIVE GRADES

(*Strayer's Method*)

Grade	Per Cent Remaining in the Various Provinces			
	Alberta	Saskatchewan	Manitoba	Nova Scotia
I	(100)	(100)	(100)	(100)
II	(100)	(100)	(100)	(100)
III	(100)	(100)	(100)	(100)
IV	(100)	(100)	(100)	(100)
V	85	89	92	(100)
VI	75	69	70	82
VII	61	42	45	62
VIII	61	57	50	58
IX	32	28	36	50
X	21	17	24	33
XI	13	12	16	18
	High School Graduation			
XII	5	3	2	4

TABLE 11

ELIMINATION IN THE SCHOOLS OF ALBERTA, SASKATCHEWAN, MANITOBA, AND NOVA SCOTIA, 1923, SHOWING CUMULATIVE PERCENTAGES OF THE ESTIMATED ENTERING GROUP ELIMINATED IN SUCCESSIVE GRADES

(*Strayer's Method*)

Grade	Per Cent Eliminated in the Various Provinces			
	Alberta	Saskatchewan	Manitoba	Nova Scotia
I	(0)	(0)	(0)	(0)
II	(0)	(0)	(0)	(0)
III	(0)	(0)	(0)	(0)
IV	(0)	(0)	(0)	(0)
V	15	11	8	(0)
VI	25	31	30	18
VII	39	58	55	38
VIII	39	43	50	42
IX	68	72	64	50
X	79	83	76	67
XI	87	88	84	82
	High School Graduation			
XII	95	97	98	96

See notes on opposite page.

NOTES ON TABLES 10 AND 11

An entirely satisfactory elimination table is very difficult to construct. The factors to be considered are numerous and, in the absence of a child-accounting system more complete than any province employs, the only recourse is to use a method such as that devised by Professor Strayer and then to consider the results in the light of such other factors as may be at least roughly estimated, which the method used appears to neglect.

1. *The Effect of a Growing Population.*—Following Professor Strayer's method, the percentages remaining in successive grades have been calculated as percentages of the *same* estimated beginning group, that of 1923. The beginning group in the rapidly growing provinces, for instance, Manitoba, has been increasing in size as the population grows. In Manitoba, the 9-year-olds increased between 1911 and 1921 by approximately 65 per cent. It would appear, then, that in provinces with an increasing population the method used has resulted in survival percentages in the upper grades which are considerably too small. On the other hand, the growth of the population has not been at or below the entering school age only. People have been moving into the new provinces at various age and grade levels. The entrance of children from outside a province into the upper school grades would tend to counteract the effects of calculating the percentages remaining from a single entering group, whether entirely or only partially, it is difficult to say. The fact that Nova Scotia, a province with a relatively stable population, having approximately the same proportion of its 15-, 16-, and 17-year-olds in high school as have Alberta and Saskatchewan (see Table 8), shows nevertheless regularly larger percentages remaining in the upper grades (see Table 10) would suggest that the method employed does not take full account of a growing population and that in Alberta, Saskatchewan, and Manitoba, the survival percentages are therefore somewhat too small.

2. *The Effect of Mortality at School Age.*—The method employed does not consider the effect of mortality of children at school age, which is about 0.5 per cent each year for ages 7 to 18. This factor would have very little effect upon the figures in the lowest grades, but its effect is cumulative, and by the time the entering group reaches the grade XI, it would amount to 5 per cent. Neglecting this factor undoubtedly makes the survival percentages a little too small.

3. *The Effect of the Excess of Retardation Over Acceleration.*—The method employed does not consider the effect of the excess of retardation over elimination. As a general rule, there are in any grade more children one or more years retarded than there are children one or more years advanced. Were those accelerated and those retarded about equal in numbers, there would be no need for any correction. The accelerants who would normally appear in any grade, but in fact have gone ahead, would cancel with the retarded ones who ought to be found in the grade, but have lagged behind. When, however, the retarded pupils regularly exceed the accelerated pupils, it then appears that survival percentages calculated as has been done are somewhat too large, for each grade contains an undue proportion of children who are the survivors of entering groups previous to the entering group from which the grade in question is regularly derived. In Ontario in 1921-22 there were, calculating from the age-grade tables given in the Minister's Report in 1922, 28.35 per cent or the pupils in high school retarded against 15.27 per cent accelerated. Survival percentages may therefore be from 10 to 15 per cent too large.

4. *Conclusion.*—From the foregoing analysis of factors which would affect elimination percentages calculated by Strayer's method, it appears that rapid growth in population tends to make the survival percentages somewhat too small. Further, if mortality at school age were to be considered, the result would be to raise the survival percentages a little. On the other hand, considering the excess of retardation over acceleration would have the opposite effect. These three factors, it would appear, tend to neutralize each other, so that the figures secured by Strayer's method are apparently not far from the truth. At the same time it must be noted that rapid growth in population, in the absence of extensive analysis of its effects, provides a considerable element of uncertainty.

It is thus obvious that the enrollment in grade I does not represent with any approach to accuracy the annual beginning group of pupils, and that the enrollments of grades II to XII if calculated as percentage of grade I would make the amount of elimination seem very much larger than it really is.

It is apparent, therefore, that the first step in securing a more accurate estimate of the elimination from successive grades is to find the true entering group. Fortunately for this inquiry, the Dominion Bureau of Statistics at Ottawa has been collecting during recent years age-grade tables of all children in many of the provinces.[13] In 1908 Professor Strayer devised a method for using the age-grade table to give an estimate of the elimination taking place from grade to grade.[14] One element of this method was the hypothesis that the true entering group is best represented not by any grade group but by the largest age group. ''The generation of children entering school in any one year,'' he argued, ''is best represented by the largest age group, which is precisely a generation of children, and since it is the largest, it probably approximates more closely than any other that generation of children which has entered the schools during the current year.''[15] Taking, then, the largest age group shown on the age-grade tables (frequently the eight-year-olds, occasionally the nine- or ten-year-olds) as the true entering group, the numbers in successive grades are represented as percentages of this group in order to show the elimination from grade to grade. Tables 10 and 11 give the percentage remaining and the percentages eliminated in successive grades in five provinces calculated by Strayer's method. The early grades of the elementary school, subject as they are more or less to the conditions already explained with regard to grade I, usually show an enrollment larger than the estimated true entering group. The figures for these grades have therefore been put in parentheses and arbitrarily called 100. Such a method would be indefensible were the early years of the elementary school being studied. As it is, the high school grades and those immediately preceding them are those of particular consequence to the present discussion.

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[13] The calculations of elimination in this chapter are based on age-grade tables found as follows: Saskatchewan and Alberta, Annual Survey of Education in Canada, 1923, p. 24; Nova Scotia, Annual Report of the Superintendent of Education, 1923, p. 59; Manitoba, Report of the Department of Education, 1923, p. 134.

[14] Strayer, G. D., Age and Grade Census of Schools and Colleges. U. S. Bureau of Education, Bulletin, 1911, No. 5.

[15] *Ibid.*, p. 12.

From Tables 10 and 11 showing figures for four provinces separately, Table 12 has been derived which gives average elimination and survival percentages. Simply averaging the figures to show the general tendency introduces no serious error because the high school populations and adolescent populations of the provinces involved are similar in size (see Table 8). At the same time, it should be observed that Ontario, with the largest high school population of any of the provinces, is not represented. Data for making an accurate estimate of elimination in Ontario are not available. Calculations for Ontario have been carried far enough, however, to indicate that no very serious disturbance of the general tendency is to be anticipated from this source.

From the figures of Table 12 it is possible to say (1) that about 36 per cent of pupils reach the first year of high school, and (2) that there is considerable elimination within the high school grades,

TABLE 12

ELIMINATION IN THE SCHOOLS OF ALBERTA, SASKATCHEWAN, MANITOBA, AND NOVA SCOTIA, 1923, SHOWING THE AVERAGE PERCENTAGES OF THE ESTIMATED ENTERING GROUP ELIMINATED AND REMAINING IN SUCCESSIVE GRADES

(*Derived from Tables 10 and 11*)

Grade	Per Cent Remaining	Per Cent Eliminated
I	(100)	(0)
II	(100)	(0)
III	(100)	(0)
IV	(100)	(0)
V	91.50	8.50
VI	74.00	26.00
VII	52.50	47.50
VIII	56.50	43.50
IX	36.50	63.50
X	23.75	76.25
XI	14.75	85.25
XII	3.50	96.50

in round numbers 36 per cent being left in grade IX, 24 per cent in grade X, and 15 per cent in grade XI, or the figures in the three high school grades may be represented approximately by the figures 100, 67, and 42. These facts have important implications for the curriculum maker. Any subject matter regarded as important for all high school pupils should appear as early in the course as possible. Again, an organization of materials within a subject so made that the major values to be derived from its study will accrue to the pupil only after two or three years of continuous application will exclude many pupils from participating in those values. They will not be in school. Whatever may be said against it on other grounds, there is an argument in these elimination figures for making each year's work self-contained. A plan of making each year self-contained tends to arrange subjects so that a few are studied intensively each year and completed, as distinguished from the plan of many subjects studied concurrently over a period of several years. One who believes strongly in the importance of the continuity of studies must face the facts and set about to change the existing conditions, or else admit the necessity of organizing his curriculum to square with the given conditions.

Summary and Conclusions

The present chapter has shown that the Canadian high school is in a period of rapid transition from a highly selective institution towards one that is much less selective in character. The second decade of the present century has been marked as the point at which the new direction became clearly apparent. The degree of selection is shown by the fact that about 36 per cent of pupils reach the first high school year and that 25 per cent of young people of high school age are in high school. With respect to its non-selective character, the Canadian high school approaches more closely the American high school than it does the secondary schools of the older European systems. To meet the needs of a growing population with an increasing range of capacities, interests, and future occupations, the new high school must become:

1. An institution whose aims and materials are greatly broadened.

2. An institution which emphasizes the exploration and discovery of the pupil's interests and capacities so that he may be guided into the kind of course which best suits him.
3. An institution in which there is a flexibility of organization which, considering the inadequacy of present methods of prognosis and the possible development of new interests, will make it possible for a pupil to change his course with a minimum of loss.

In addition to meeting the difficulties of a rapidly expanding population the fact of elimination from school must be dealt with. Of 100 pupils who enter high school, about 67 are left in grade X, about 42 are left in grade XI, and not all of these 42 graduate. Educational leaders in Canada, therefore, face the problem of taking effective measures to reduce elimination or, alternatively, of so organizing the course of study that pupils who drop out will profit to a maximum degree by their brief stay in high school.

CHAPTER VI

ARTICULATION WITH THE ELEMENTARY SCHOOL

INTRODUCTION

The secondary school in Canada as in the United States is squarely superimposed upon the elementary school,[1] the two together forming, in so far as the general structure of the system is concerned, a single continuous system. The momentous change from a dual to a single system appears to have occurred during the third quarter of the Nineteenth Century.[2]

The present system, therefore, has been in operation a little more than fifty years. It was a difficult matter to bring about the external change; it is a still more difficult matter to perfect the internal organization which the change makes necessary. In the present chapter by examining the point of articulation between these two formerly disparate sections of the public school it will be possible to discover how far they now form a continuous system. The methods of promotion from one part to the other, the degree of selection exerted, and the sequence of subject matter will be discussed, and finally it will be argued that a reorganization of the upper elementary and the lower high school grades should be undertaken if the benefits of a continuous system of elementary and secondary education are to be realized.

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[1] To this statement the Roman Catholic system of Quebec constitutes at least a partial exception. The classical colleges, which in Catholic Quebec are regarded as distinctively secondary institutions, are not superimposed upon the elementary schools. For some distance they run parallel to the elementary schools and then, like the French lycées, carry their pupils through to the baccalaureate degree.

[2] The evidence for this statement is as follows: In Upper Canada (Ontario) in the middle of the Nineteenth Century, the grammar schools (i.e., secondary schools) were engaged in much work of an elementary character. Fully half of their pupils were doing elementary school work (Bell, N. W., The Development of the Ontario High School, p. 58). By the Act of 1871, the name High School was substituted for Grammar School, and an examination for entrance into the high school was established on subjects which were taken up in the first four classes of the elementary or common school course. (Bell, *op. cit.*, pp. 111 and 112.)

In Nova Scotia, the public school program on the basis of eight years in the common school course and four years in the high school was first formulated between 1880 and 1885. The Nova Scotia grammar schools apparently had been absorbed into the provincial system by the Free School Act of 1864. (Canada and Its Provinces, Vol. 14, II, pp. 524-25.)

In New Brunswick as early as 1873 the Board of Trustees of the City of St. John had formulated a course of study for its schools extending over eleven grades, of which there were four primary grades, four advanced, and three high school. (Annual Report of the Chief Superintendent of Education, 1873, pp. 78-81.) In the following year the city of Fredericton issued a course of instruction which covered twelve grades. (Annual Report of the Chief Superintendent of Education, 1874, pp. 47-56.) By 1883 the Annual Report of the Chief Superintendent contained statistical tables of the pupils in the province as a whole by subjects of instruction in the various "standards" or grades, standards I to VIII being grouped under the heading public schools, and standards IX to XII under the heading of grammar schools.

PROMOTION AND SELECTION FROM THE ELEMENTARY TO THE HIGH SCHOOL GRADES

Methods of Promotion

The end of the eighth school year [3] marks a well-defined administrative line. Up to this point a pupil's promotion has been a question for the principal and teachers of his own school to decide; but here the several provincial Departments of Education set certain conditions which he must meet if he is to continue his public school education further. The pupil must either pass a formal provincial examination or qualify for recommendation under one or another of the schemes which are recognized as permitting exemption from examinations. A summary of the schemes under which pupils may be exempted from provincial high school entrance examinations follows.

SUMMARY OF THE SCHEMES UNDER WHICH PUPILS MAY BE EXEMPTED FROM PROVINCIAL EXAMINATIONS FOR ENTRANCE TO HIGH SCHOOL

British Columbia.[4] The Department will promote pupils from an elementary school of seven or more divisions, on the report of the principal of the elementary school that they have satisfactorily covered the elementary school course and are fitted for high school work, but not more than the 60 per cent of the principal's recommendations who rank highest will be accepted without examination.

Alberta.[5] The Department will promote pupils: (1) on the recommendation of the superintendent of schools, or where no superintendent is employed, by the principal of the elementary school, in all school districts where the number of teachers employed exceeds thirty; (2) on the recommendation of the principal of the elementary school where the school has a staff of six or more teachers and the work of grade VIII has been reported as satisfactory by an inspector of schools, and where the pupils recommended have been in regular attendance.

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[3] This statement does not apply to the Roman Catholic system of Quebec. In the Protestant system of Quebec, the eighth and ninth school years are called intermediate. In Ontario, the examination for entrance to high school comes at the end of the first four forms, which require, as a rule, 8 years to complete. Ottawa and Toronto, however, have adopted a seven-year elementary plan.

[4] Department of Education, Courses of Study for the Elementary, High, Technical, and Normal Schools of British Columbia, 1923, p. 72.

[5] Regulations of the Department of Education governing the Public School Leaving Examination, 1924, p. 1.

Saskatchewan.[6] Pupils will be promoted by the Department of Education:

(1) On the recommendation of the high school principal in those high schools where provision is made for the instruction of grade VIII pupils.

(2) On the recommendation of the superintendent, the principal of the elementary school, or the teacher of grade VIII as the case may be, in school districts in which a high school is in operation and the work of the teacher in charge of grade VIII has been satisfactorily reported on by an inspector.

(3) On the recommendation of the principal of the elementary school or the teacher of grade VIII in town districts where no high school is in operation, provided,

(*a*) that the grade VIII teacher has been in charge of the recommended pupils for a year previous to recommendation.
(*b*) that the last report of the inspector on such teacher was satisfactory.

In the case of recommendations made under (2) and (3) reports from the high school on the success of the recommended pupils are required.

Manitoba.[7] Pupils will be promoted by the public school inspector or superintendent in consultation with the principal of the high school and the teacher of grade VIII in school districts which maintain a high school (i.e., a high school department), collegiate department, or collegiate institute.

Ontario.[8] Pupils will be promoted by the local Entrance Board, which, after receiving the report of the inspector on the efficiency of the elementary schools, decides whether or not to accept recommendations, and, should a scheme of recommendation be adopted, which of the pupils recommended by the principal of an elementary school it will promote.

New Brunswick.[9] All pupils write provincial examinations.

Quebec, Protestant.[10] All pupils write provincial examinations.

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[6] Department of Education, Regulations and Recommendations Governing Programme of Courses of Study for Secondary Schools, 1923, p. 7.

[7] Programme of Studies for the Schools of Manitoba, 1923, p. 28.

[8] Department of Education, Courses of Study, Public and Separate Schools, 1924, Section 6.

[9] Manual of the School Law and Regulations of New Brunswick, 1922, Regulation 46.

[10] The examination papers for the various grades from V to XI are prepared by a central examining authority, and the written answers below grade IX in high schools or below grade VIII in intermediate schools are read and valued by the staff of the school in which they were written. (Memoranda of Instructions for Teachers, Protestant Intermediate Schools and High Schools of the Province of Quebec, 1925, pp. 62 ff.).

Nova Scotia.[11] Pupils are promoted on the certificate of a licensed teacher that a pupil has satisfactorily completed a common school course of study. The regular mode of entrance into a county academy, however, is by examination.

Prince Edward Island.[12] Pupils are promoted by the school.

It will be seen from this summary that all but two of the provinces make provision for promoting pupils of selected schools by recommendation. The exceptions are New Brunswick and the Protestant system of Quebec. In the latter case the provincial grants to superior schools are in part dependent upon the results of examinations; and until this extremely doubtful method of allocating grants is done away with, it will be difficult to relieve the pupils from the burden of an examination set by external authorities.

The remaining provinces, by the requirements which they set, relative to the types of schools from which recommendations will be accepted, seem to imply that with certain checks, an efficiently conducted graded elementary school may be depended on to judge of the competence of its pupils to go on to high school. The more desirable type of check seems to be the practice of Saskatchewan where the success of recommended pupils in high school is to be reported to the Department. A less desirable type of check would appear to be the method employed in British Columbia when the lowest forty per cent of a principal's recommendations are automatically subjected to examination.

The limitations upon the size of schools which may recommend pupils obviously exclude from the privilege the great body of small rural and village schools. On these schools the incidence of the examination will weigh most heavily and in these schools the pressure of an external examination would seem likely to work greater harm. It is an unfortunate anomaly that the schools which most need sympathetic personal supervision should be most at the mercy of the cold-blooded supervisory instrument which is furnished by a provincial examination.

Notwithstanding the provision made for exempting pupils from the Entrance Examination, the great majority still write them. Tables 13 and 14 present statistics of promotions, recommendations, successes, and failures for six provinces, covering a three-year period in the case of four of them. From Table 14 it will be seen that in 1923 in five provinces only 22 per cent of the candidates were exempt. It should be explained that in Nova Scotia a pupil may legally go forward to high school in any school except a county academy on the certificate of a licensed teacher. The pupil, however, receives no provincial recognition of having passed successfully through an elementary school unless he passes the provincial examination. There are no data to show how many pupils went on to high school on a teacher's certificate, and as a result the space in Table 14 opposite Nova Scotia under the heading "number promoted without examination" contains the word "unknown." It is clear that the great majority of pupils attempt the grade VIII examination, for the number who tried it in 1923 was actually larger than the number enrolled in grade VIII, in that year.[13]

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[11] Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction of Nova Scotia, 1921, Regulations 120 and 77.

[12] The examination is not compulsory. "The Department *desires* that as many as possible of the school children of the province who are eligible will be candidates for the Public School Diploma." [Italics by the writer.] (Table of Studies in the Public Schools, 1923, p. 1.)

When local areas are permitted to promote their pupils from the elementary school to the high school, it may be safely assumed that a larger percentage of pupils will be permitted to go forward. There is positive evidence of this fact from the Province of Nova Scotia, as will be noted presently. So far, the schemes which the provinces have instituted for permitting local promotion at this point leave the majority of pupils unaffected. A provincial examination with the selective influence which it exerts is still the prevalent method of testing a pupil's fitness to proceed to high school. The amount of selection which results from the examination will be discussed in the next section.

The Selective Influence of the High School Entrance Examination

Table 14, which is derived directly from Table 13, shows the percentage of pupils who were successful both by examination and by recommendation, and of those who failed. The most important figures of this table are in column (4), from which it may be observed that in 1923 in five provinces 27 per cent of the pupils failed of promotion to high school. The percentage failing was lowest in New Brunswick and Ontario and highest in Alberta and British Columbia. The New Brunswick figures cannot be regarded as indicative of a tendency to reduce greatly the selection at this point. The number of pupils in New Brunswick who took the entrance examination is so small in comparison with the total population of the Province (New Brunswick in 1921 had a population about three-fourths of that of Nova Scotia, but fewer than one-fourth as many pupils trying the entrance examination) that some other selective factor must be at work.

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[13] There were 8,809 pupils who took the examination; 6,710 pupils were enrolled in grade VIII.

TABLE 13

HIGH SCHOOL ENTRANCE EXAMINATION RESULTS IN SIX PROVINCES *

(1) Province	(2) Year	(3) No. Promoted Without Examination	(4) No. Examined	(5) No. Successful on Examinations	(6) No. Who Failed on Examinations
Ontario	1921	6,850	24,671	18,410	6,261
	1922	7,904	28,210	19,656	8,554
	1923	8,497	29,551	21,392	8,159
Saskatchewan ..	1921	1,284	5,577	3,694	1,883
	1922	1,346	6,591	4,625	1,966
	1923	1,629	7,332	4,924	2,408
Alberta	1921	1,120	4,368	2,589	1,779
	1922	1,590	5,328	2,590	2,738
	1923	1,933	5,556	2,819	2,737
British Columbia	1921	2,689	2,556	1,307	1,249
	1922	1,417	4,231	2,168	2,063
	1923	1,791	4,939	2,788	2,151
Nova Scotia	1923	Unknown	8,809	4,667	4,142
New Brunswick...	1923	....	2,098	1,862	236

* The figures for Saskatchewan are derived from the Annual Report of the Department of Education of the Province of Saskatchewan, 1923, p. 71. The figures for Ontario are derived from the Annual Reports of the Minister of Education, Province of Ontario, for 1921, 1922, 1923, pp. 303, 324, and 328, respectively. The remainder of the figures are derived from the reports of the Dominion Bureau of Statistics as follows: For 1921 from Statistical Report on Education in Canada, 1921, p. 87; for 1922 from Annual Report on Education Statistics in Canada, 1922, p. 109; for 1923 from Annual Survey of Education in Canada, 1923, p. 49.

When in some provinces failure percentages are frequently between 30 and 40 per cent, it is clear that the idea of secondary education for all is by no means generally accepted. The general structure of the public school may provide a continuous system of elementary and secondary education, but there remains a tendency to exert a considerable degree of selection on the basis of capacity between the elementary and the high school grades.

TABLE 14

HIGH SCHOOL ENTRANCE EXAMINATION RESULTS IN SIX PROVINCES, PERCENTAGES SUCCEEDING AND FAILING

(1) Province	(2) Year	(3) Per Cent of Pupils Promoted by Examination and Certificate	(4) Per Cent of Pupils Who Failed of Promotion	(5) Per Cent of Pupils Who Were Examined	(6) Per Cent of Pupils Examined Who Failed
Ontario	1921	80	20	78	25
	1922	76	24	78	30
	1923	79	21	78	28
Saskatchewan ..	1921	73	27	81	34
	1922	75	25	83	30
	1923	73	27	82	33
Alberta	1921	68	32	80	41
	1922	60	40	77	51
	1923	63	37	74	49
British Columbia	1921	76	24	49	49
	1922	63	37	75	49
	1923	68	32	73	44
Nova Scotia	1923	Unknown	Unknown	Unknown	47
New Brunswick...	1923	89	11	100	11
Five Provinces (omitting Nova Scotia)	1923	73	27	78	32

The percentages of this table are derived from the figures in Table 13 as follows:

Column (3) of this table gives the percentage which the sum of columns (3) and (5) of Table 13 is of the sum of columns (3) and (4) of Table 13.

Column (5) of this table gives the percentage which column (4) of Table 13 is of the sum of columns (3) and (4) of Table 13.

Column (6) of this table gives the percentage which column (6) of Table 13 is of column (4) of Table 13.

At the same time there is good evidence from the Province of Ontario that the amount of selection at the end of the elementary grades is steadily decreasing. An interesting historical table appears in the Annual Reports of the Minister of Education for Ontario which shows the number of candidates and the number and percentage who were successful over a period of years from 1877—the examination was instituted in 1871—to 1924. This table has been reproduced as Table 15. The table shows that there is not only a large increase in the number of candidates but also a decided increase in the percentage of candidates who have been successful.

TABLE 15

HIGH SCHOOL ENTRANCE EXAMINATION, ONTARIO, 1877-1924 *

Year	Total Number Examined	No. Granted Certificates	Per Cent	Year	Total Number Examined and Recommended by Principals	No. Granted Certificates	Per Cent
1877....	7,383	3,836	51.95	1907....	22,144	15,430	69.68
1882....	9,607	4,371	45.49	1912....	22,679	13,977	61.62
1887....	16,248	9,364	57.63	1917....	21,975	15,751	71.67
1892....	16,409	8,427	51.35	1922....	36,114	27,560	76.31
1897....	16,384	10,502	64.09	1923....	38,048	29,889	78.55
1902....	18,087	13,300	73.53	1924....	38,897	32,340	83.14

* Report of the Minister of Education, Province of Ontario, 1924, p. 71.

Conflict Between the Selective and Non-Selective Idea of Secondary Education in Nova Scotia

The situation in Nova Scotia regarding promotion from the elementary to the high school grades affords an instructive example of the conflict between the selective and the non-selective ideas of secondary education. From the elimination tables presented in the previous chapter it was discovered that there was less elimination in Nova Scotia between grades VIII and XI than in the other provinces for which elimination figures were presented. The amount of elimination, indeed, was surprisingly small, about 9 per cent. In the present chapter it has been shown that in 1923 Nova Scotia failed 47 per cent of the candidates at the provincial grade VIII examination. These two facts appear on the surface to be utterly contradictory. The explanation, however, is that local authorities are empowered to classify the pupils of their own areas. The result of such local classification with the slight degree of elimination between grades VIII and IX has been revealed in the elimination tables. The examination at which such a high degree of mortality has been shown in the present chapter is the County Academy Entrance Examination conducted by the central authority for pupils who have completed grade VIII. Pupils who pass this examination may attend the academy of their county free of charge and count toward the number necessary to gain the academic grant for the academy in which they are enrolled.[14] The standards maintained at the examination may fairly be taken to represent what the central authorities deem adequate preparation for high school studies. The number of pupils who try this examination is obviously very much greater than the number seeking entrance to a county academy. Obviously success on this examination is generally regarded throughout the province as carrying provincial recognition of the pupil's having successfully completed the elementary school course.

It is clear that here we have two divergent views of the selective character of secondary education, the non-selective view held by teachers and school officials of local areas, the selective view found in the standards maintained at the provincial grade VIII examination. One need not be a prophet to predict which view will ultimately prevail.

Promotion into Secondary Vocational Courses

Where vocational education on the secondary level has made substantial progress, the selection of pupils by means of a high school entrance examination has in part broken down. This breakdown is practically confined to Ontario. The Adolescent Attendance Act in effect requires that all pupils shall have an opportunity to go forward in some direction and the vocational schools have opened up courses into which, in so far as they are available, all pupils may go. A pupil in Ontario may now go forward into any of the schools or departments operating under the Vocational Education Act without passing the high school Entrance Examination.[15]

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[14] The Education Act, 1911, c. 2, s. 123; Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction of Nova Scotia, 1921, pp. 154-8.

It is thus apparent that, in Ontario the degree of selection at the close of the elementary school is contingent upon the availability to the pupil of full- or part-time vocational courses. It is apparent also that a reduction in the selective factor at or about grade VIII in other provinces awaits, in part at least, upon the provision of a wider variety of curricula in the secondary system. One of the essential features of a continuous system of elementary and secondary education is thus seen to be a considerable degree of differentiation at the secondary level.

SEQUENCE OF SUBJECT MATTER

Abrupt Change in Subject Matter

An examination of provincial programmes of study shows that in Canada, on the whole, the change in subject matter which the pupil faces in his first high school year is very marked. Generally speaking, the pupil now meets for the first time one or two languages, algebra or geometry, or both, and a more or less systematic treatment of science. An illustration of a programme of studies in which the change is marked drawn from the Province of British Columbia is given in Table 16 on page 94.

The subjects studied in Grades VIII and IX are placed in parallel columns in Table 16. From this table it will be seen that the pupil in his first high school year may have as new subjects algebra, geometry, and two foreign languages. Furthermore, geography, music, and health education disappear,[16] there is no longer time for domestic science or manual training; writing and spelling become

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[15] Pupils who have at least the standing of the fourth form of the public or separate schools and who are able to take up the courses selected may be admitted to commercial, industrial, homemaking, agricultural, and art schools or departments. A pupil who has attended an industrial, homemaking, or art school or department for one or more years may be transferred to one of the courses offered in a technical high school or department. Part-time, special, and evening classes are open without regard to school standing. (Department of Education, Recommendations and Regulations for the Establishment, Organization, and Management of Vocational Schools, and Vocational Departments in Continuation Schools, High Schools and Collegiate Institutes, 1922, ss. 23 to 26.)

[16] In the high school syllabus school boards are urged to provide a suitable course in physical training.

TABLE 16

COMPARISON OF SUBJECTS STUDIED IN GRADES VIII AND IX IN BRITISH COLUMBIA

Subjects of Grade VIII[1]		Subjects of Grade IX[2] (General Course)
Language		English
Composition		Reading and Orthöepy
Grammar		Writing and Spelling
Reading and Literature		English Literature
Spelling		Composition
Writing		History (ancient)
Arithmetic		Mathematics
Geography		Arithmetic
History (British and Canadian History and Civics)		Algebra
Drawing		Geometry
Nature Study and Elementary Agriculture		Classics
Music		Latin
Health Education		French
Domestic Science	In schools which offer these subjects	Drawing and Design
Manual Training		General Science (may be taken in place of one foreign language)

[1] Department of Education, Programme of Studies for the Elementary Schools of British Columbia, 1925-26, pp. 76 ff.

[2] Department of Education, Programme of Studies for the High, Technical, and Normal Schools of British Columbia, 1925-26, pp. 5 and 6.

incidental; modern history (Canada and England) gives place to ancient history, and nature study is succeeded by general science. Only in English, arithmetic and, in part, history and science is continuity found. Such lack of articulation argues that the elementary and high school grades in British Columbia are continuous in name rather than in fact.

Abrupt Change Not Justifiable

An abrupt change in the character of the subject matter of instruction between grades VIII and IX is justifiable only if there is an equally abrupt change in the character of pupils' mental processes and outlook on life, coincident with the transition from one grade to the other. In the first place, it is well known that the chronological age of pupils varies considerably in any grade,[17] so that they do not all have the same degree of maturity at any promotion level. In the second place it has been convincingly argued by Inglis[18] that the development of pupils' mental processes is gradual rather than periodic. In the third place, if it is argued that the onset of puberty brings such important changes in the pupils' outlook on life that a decisive change in subject matter should accompany the change, it must be remembered that the onset of puberty is variable. For boys the variability of the event is represented by a mean square deviation of 1.51 years,[19] and a chronological age range of 3 years, about 12 to 15, must therefore be taken in order to secure a group which will include approximately two-thirds of the cases.

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[17] For example the age range of the middle 50 per cent of the pupils in grade VIII of the urban schools of Canada was in 1923 from 13.29 to 15.16 years. (Derived from Annual Survey of Education in Canada, 1923, p. 26.)

Even though considerable importance be attached to the change which the coming of adolescence brings, these changes cannot be adequately provided for by an abrupt change in the subject matter and organization of the school. Finally, an examination of the time-table of an English secondary school[20] providing courses for pupils from 10 to 18 years of age shows how gradually changes in subject matter are introduced when a single school takes its pupils through the period which in Canada is broken by the step from the elementary to the secondary grades.

Provisions for Securing Better Continuity of Subject Matter

The British Columbia programme quoted in Table 16 affords a rather extreme case of lack of continuity. Elsewhere in Canada provision has been made for a more gradual transition from the elementary to the high school grades. The best example of this is to be found in the high schools of the Protestant system of Quebec, and the reason for this may be ascribed in part to the fact that these schools regularly include all grades from I to XI. Table 17 shows the subjects of grades VII, VIII, IX, and X in parallel columns. The change from grade to grade, particularly from grade VIII to grade IX, is quite gradual.

A second example may be cited from the Province of Alberta. Here a series of ''Directive Courses'' has been instituted in grades

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[18] Inglis, Alexander, Principles of Secondary Education, Chap. II.

[19] *Ibid.*, pp. 21 and 22 (quoting Crompton, C. W.).

[20] Sleight, A. C., The Organization and Curricula of Schools, p. 112.

TABLE 17

SEQUENCE OF SUBJECT MATTER FROM GRADES VII TO X IN THE HIGH SCHOOLS OF THE PROTESTANT SYSTEM OF QUEBEC *

GRADE VII	GRADE VIII		GRADE IX		GRADE X
Compulsory	Compulsory	Optional	Compulsory	Optional	Compulsory
1. Scripture 2. English Dictation Grammar Literature Composition 3. History 4. Geography 5. Arithmetic 6. French 7. Agriculture 8. Drawing	1. English Dictation Grammar Literature Composition 2. History 3. Geography 4. Arithmetic 5. French 6. An optional subject	Latin Algebra Drawing Bookkeeping	1. English Dictation Grammar Literature Composition 2. History 3. Arithmetic 4. Algebra or Geometry 5. Geography 6. French	Latin Bookkeeping Drawing A mathematical subject not taken in the compulsory group	1. English Dictation Literature Composition 2. History 3. Algebra or Geometry 4. French 5. Geography or Physics or Chemistry or Botany 6. Latin or Drawing or A subject not already taken from groups 3 or 5

* Memoranda of Instructions for Teachers, Protestant Intermediate Schools and High Schools of the Province of Quebec, 1925, p. 5.

VII and VIII [21] which are designed to provide a better measure of articulation with the courses which the pupil subsequently expects to follow.

The constants, which are to occupy 80 per cent of the time, are as follows: English, Arithmetic, Geography, Citizenship, Writing, Music, and Physical Education.

The directive or optional courses are to occupy 20 per cent of the time, and are organized as follows:

(*a*) The General Course—Manual Arts or Household Economics, Agriculture, Art.
(*b*) The Agricultural Course—Agriculture, Art.
(*c*) The Language Course—Manual Arts or Household Economics, French, Art.

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[21] English and Citizenship, Part I of the Course of Studies for the Elementary Schools of Alberta, 1922, p. 5.

(*d*) Industrial Course—Girls: Household Economics, Art. Boys: Manual Arts, Art.

(*e*) Commercial Course—Commercial Subjects, Art.

All courses are of equal value, and admit the successful student equally readily to the secondary school.

The Alberta scheme brings to view a difficult feature of any scheme of articulation where the pupils proceeding to high school are becoming more heterogeneous and where differentiation on the secondary level is beginning to be regarded as important. Proper articulation under these circumstances involves not a single-track sequence which all will follow, but a period of exploration and guidance which will roughly sort the pupils and articulate their studies with the differentiated courses which they are later to pursue.

The most decisive step in the reorganization of the transition period has been taken in the city of Winnipeg. In this city several junior high school units have been organized, including grades VII, VIII, and IX, and a programme of studies has been approved by the Advisory Board of the province. This promising beginning has been followed only to a small extent and in a modified form in other parts of the province.

AN INTERMEDIATE UNIT

The argument advanced here is for a reorganization of the upper years of the elementary school and the early years of the high school so as to make the school system continuous, not merely in structure, but also in reality. The main grounds for this argument are as follows:

(1) Every boy and girl should continue in school either full or part time up to the age of eighteen.

(2) A high school population with such varied interests, capacities, and future occupations requires a wide differentiation of curricula at the secondary level.

(3) Between the early years in which all pupils follow the same studies and the final years in which differentiation has been introduced, there should be an intermediate period of which guidance is the keynote.

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[22] Briggs, Thomas H., The Junior High School, p. 26.

The functions of such an intermediate unit have been clearly set forth by Briggs in the following statement.[22]

> 1. To continue, in so far as it may seem wise and possible, and in a gradually diminishing degree, common, integrating education.
> 2. To ascertain and reasonably to satisfy pupils' important immediate and assured future needs.
> 3. To explore by means of material in itself worth while, the interests, aptitudes, and capacities of pupils.
> 4. To reveal to them, by means of material otherwise justifiable, the possibilities in the major fields of learning.
> 5. To start each pupil on the career which, as a result of the exploratory courses, he, his parents, and the school are convinced is most likely to be profitable to him and to the State.

SUMMARY

While Canada has achieved in the external structure a continuous system of elementary and secondary education, the problem of integrating these two formerly disparate elements is as yet only partially solved. The method of promotion, predominantly a provincial examination, still remains a selective instrument of considerable force; and extreme failure percentages, such as those found in Nova Scotia are clearly out of harmony with public opinion in general in that province. Only in the Province of Ontario, with its provision for compulsory attendance of adolescents and its comparatively generous provision of varied curricula at the secondary level has the selective factor been definitely repudiated, except for those whose secondary education is to be primarily academic in character.

In so far as the sequence of subject matter is concerned, an abrupt change in the character of studies unjustifiable on psychological grounds is still the prevailing practice. At the same time there is evidence of an attempt to improve the sequence of studies by a partial reorganization of the materials of one or more of grades VII, VIII, and IX. This reorganization should be carried forward with emphasis upon continuity, present needs, exploration, broadening, and guidance.

CHAPTER VII

HIGH SCHOOL EXAMINATIONS

INTRODUCTION

The Canadian high school has been called "examination ridden." "Examination-incubus" is a term which has been applied to the high school examinations of Ontario. Although changes have been introduced since the time that these criticisms were made, which have reduced the extent of provincial examinations, yet the Canadian high school is still largely controlled by external tests. This, as has already been pointed out in Chapter III, is one of the important ways in which the highly centralized systems of school control are maintained. At the same time, the number of pupils who are receiving their training in "odds and ends" of high schools (see Chapter IV) makes it very difficult to abandon a procedure which sets up rather well-defined standards.

Whatever objections may be urged against external tests on other grounds, the record of successes and failures at provincial examinations gives an investigator a measure of the degree to which the schools are achieving the standards set for them. High percentages of failure among pupils, particularly when the great majority of these pupils have been admitted to high school by means of a provincial examination, may be regarded as evidence of maladjustment. From what has already been said in Chapter V of the difficult transition period through which the Canadian high schools are passing, it would not be surprising to find amounts of failure indicative of such maladjustment. This hypothesis will be only too strongly confirmed.

The present chapter will deal with the extent of the provincial examination system, the recent changes tending to reduce its extent, and the provisions under which pupils may be exempt from its operation. In addition, the record of success and failures will be presented and the causes of the maladjustment revealed by high percentages of failure will be sought.

THE SYSTEM OF PROVINCIAL EXAMINATIONS

Table 18 shows the extent of the provincial high school examination system as it operates at present. In every province—with the single exception of the Roman Catholic system of Quebec—success at a provincial examination is the sole method of securing recognition of the successful completion of a high school course. In two systems a provincial examination must be passed in order to secure promotion from grade to grade. In five provinces the local authorities, when the schools meet certain requirements, may promote pupils within the high school course. In four systems provincial examinations are absent from grade IX or from both grades IX and X.

The provisions for the exemption of pupils from provincial examinations within the high school course may be summarized as follows:[1]

British Columbia. Pupils attending ''high schools'' are exempt from provincial examinations at the close of grades IX and X. This provision exempts nearly all secondary pupils from these examinations.

Saskatchewan. An examination in arithmetic, grammar, geography, and hygiene is required, at the close of grade X, of pupils who are taking the ''Teachers' Course.'' Otherwise the school promotes.

Manitoba. Pupils who are attending collegiate institutes may be promoted from grade IX to grade X and from grade X to grade XI on the recommendation of the school.

Nova Scotia. Provincial certificates of having passed grade IX and grade X are not required for the local grading of schools.

Ontario. Lower School standing for entrance into the normal schools will be granted to pupils in attendance at any collegiate institute, high school, or continuation school on the certificate of the principal of the school and the teachers of the subjects concerned. The provision made in the school for teaching the Lower School courses must be satisfactory to the high or continuation school inspector and must be maintained throughout the year. To be granted credit in any subject, the pupils must complete the prescribed course of study and pass comprehensive tests conducted by the teacher of the subject. One of these tests must be held towards the close of the school year and must cover the prescribed course of study.

Lower School examinations are conducted as formerly for pupils who are not in attendance at collegiate institutes, high schools, or continuation schools, and also for pupils who fail to pass the tests set by the teachers.

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[1] The sources from which this summary is drawn are the same as those appended to Table 18.

TABLE 18

PROVINCIAL EXAMINATION OF HIGH SCHOOL PUPILS SHOWING THE GRADES AT THE CLOSE OF WHICH THESE EXAMINATIONS ARE CONDUCTED

Province	Grade IX	Grade X	Grade XI	Grade XII
British Columbia[1]	(x)	(x)	x	x
Alberta[2]	x	x	x	x
Saskatchewan[3]	—	(x)	x	x
Manitoba[4]	(x)	(x)	x	x
Quebec (Protestant)[5]	x	x	x	Courses of grade XII not found in high schools
Quebec (Roman Catholic)[6]	—	—	Courses equivalent to these grades not found in primary complementary schools	
New Brunswick[7]	—	—	x	x
Nova Scotia[8]	(x)	(x)	x	x
Prince Edward Island[9]	—	x	Courses of grades XI and XII given in Prince of Wales College	
Ontario[10]	Lower School (2 years) (x)		Middle School (2 years) x	Upper School (1 year) x

NOTE: The letter x in any space means that a provincial examination is the regular method of determining that a pupil has satisfactorily completed that grade. Within parentheses it means that provincial examinations are held but provisions are made for exemption from this examination in whole or in part. A dash in any space means that no provincial examinations are held.

1. Department of Education, Programme of Studies for the High, Technical, and Normal Schools of British Columbia, 1925-26, p. 65.
2. Regulations of the Department of Education relating to Programmes of Studies and Annual Examinations for Secondary Schools for the year ending July 30, 1926, pp. 1-5.
3. Department of Education Regulations and Recommendations governing Programme of Courses of Study for Secondary Schools, 1926, Regulation 11.
4. Report of the Department of Education, Province of Manitoba, 1924, p. 86.
5. Memoranda of Instructions for Teachers, Protestant Intermediate Schools and High Schools of the Province of Quebec, 1925, pp. 62, 63.
6. The Catholic Central Board of Examiners is concerned only with examination for teachers' diplomas. (School Regulations of the Catholic Committee of the Council of Public Instruction of the Province of Quebec, 1922, Chap. IV.)
7. Manual of the School Law and Regulations of New Brunswick, Regulation 45. (This regulation deals with examinations at the close of grade XI. Examinations at the close of grade XII are referred to in the Course of Instruction for Grammar and High Schools, 1923-24.)
8. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction of Nova Scotia, 1921, Regulations 121 and 130.
9. Table of Studies in the Public Schools, 1923, p. 1.
10. Department of Education, Courses of Study and Examination of the High Schools, Collegiate Institutes, and Continuation Schools, Revised, 1924, pp. 75-79.

The most sweeping change in the direction of removing examinations was made in Ontario in 1923 when the provincial Lower School Examination was discontinued for pupils in the collegiate institutes, high schools, and continuation schools who were recommended for promotion by their principal and by their teachers. This change relieved the provincial examiners of correcting more than 85,000 [2] examination papers in the various subjects of the Lower School and incidentally relieved the pupils of writing them. ''The plan,'' according to the Ontario High School Inspectors,[3] ''was tried at the examination of 1923 . . . proved entirely successful and is to be repeated at the examination of 1924. It was intended for the advantage of the Department, but has worked out to the advantage of teachers and pupils as well.''

Manitoba began a similar but less comprehensive experiment in 1921 when collegiate institutes only were given the right to recommend pupils for promotion from grade IX to grade X and from grade X to grade XI. In the 1924 report of the Department of Education the Registrar reports the results of an analysis [4] of the provincial grade XI examination results of pupils in 1923 who had been promoted to grade XI by collegiate institutes in 1922. The success of these pupils in the 1923 grade XI provincial examination was compared with the success of pupils in the province as a whole. It was found that 28⅔ per cent of the pupils who had passed by recommendation in 1922 failed in 1923, while the percentage of failures in 1923 for the province as a whole on the grade XI examination was 48⅔ per cent. The Registrar remarks that ''Among other things, this demonstrated to the Advisory Board that the three-year experiment along this line, commenced in 1921, was certainly not tending to lower the standard of these collegiate institute students as compared with the rest of the Province.'' Since 1922 the Department of Education of British Columbia has greatly reduced the number of obligatory entrance and high school examinations.[5] Alberta provides the single example of the contrary tendency, departmental examinations for all high school pupils at the close of grades IX and X having been reinstated in that province in 1925-26.

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[2] Report of the Minister of Education, Province of Ontario, 1923, p. 93.

[3] *Ibid.*, p. 30.

[4] Made by Mr. A. C. Campbell, Principal of St. John's Technical High School, Winnipeg, and reported in the Report of the Department of Education, Province of Manitoba, 1924, pp. 59, 60.

[5] Province of British Columbia, Survey of the School System, p. 259.

These illustrations are evidences of a general tendency to relieve the pressure of provincial examinations during the first two years of the course. It is important to observe that this step is taken in the direction of increased responsibility for local authorities. But the central authority has long held the examining power in its own hands. It is not merely a question of relinquishing the power, but also of making certain that principals and teachers are competent to assume their new responsibilities which include for both teachers and principals opportunities for training in the technique of measuring the results of teaching.

Successes and Failures at Provincial Examinations

Figures for success and failure in the high school examinations are presented for six provinces in Tables 19 and 20. The absence of figures for New Brunswick, Prince Edward Island, and the Protestant system of Quebec is less to be regretted because the high school enrollments in these systems are comparatively small. The figures for the five provinces of Table 19 are reported as the results upon the whole examination at successive grades. (Saskatchewan figures are, as will appear presently, a partial exception to this statement.) Ontario, on the other hand, reports examination results by papers in the several subjects. As a result, the Ontario figures have been reported separately in Table 20.

In Table 19, representing five provinces, there are also certain gaps. British Columbia does not report the numbers who were promoted from grades IX to X and grades X to XI on the recommendation of the principals of high schools, giving only the results for the few pupils who were unable to comply with the provisions for exemption and therefore were required to write a provincial examination. Manitoba reports the grade XII examination results in three parts, a practice which makes it difficult to include these results in a combined table with other provinces. Saskatchewan gives no information about promotions in grades IX and X where, in the years under consideration, no provincial examinations were required.

The figures in Table 19 also require some explanation to

TABLE 19

NUMBER AND PERCENTAGE OF HIGH SCHOOL PUPILS IN FIVE PROVINCES WHO PASSED OR FAILED IN THE VARIOUS GRADES

Province	Promoted or Failed	Grade IX		Grade X		Grade XI		Grade XII		Total	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Alberta											
1922	P	3,059	97	1,290	65	853	67	282	70	5,484	80
	F	89	3	690	35	429	33	122	30	1,330	20
1923	P	3,169	97	1,607	62	976	63	310	68	6,062	77
	F	100	3	974	38	580	37	143	32	1,797	23
Nova Scotia											
1922	P	2,079	57	1,462	53	726	50	114	42	4,381	52
	F	1,546	43	1,284	47	711	50	156	58	4,097	48
1923	P	2,240	61	1,273	43	941	51	213	59	4,667	53
	F	1,445	39	1,703	57	896	49	146	41	4,190	47
British Columbia		Very few pupils examined by Department. No report available on success and failure of all pupils									
1922	P					1,367	88	23	62	1,390	87
	F					194	12	14	38	208	13
1923	P					1,464	79	65	59	1,529	78
	F					382	21	46	41	428	22
Manitoba											
1922	P	3,607	87	2,224	80	1,443	67	Results difficult to tabulate		7,274	80
	F	541	13	542	20	726	33			1,809	20
1923	P	3,291	86	2,238	75	1,261	50			6,790	73
	F	544	14	759	25	1,271	50			2,574	27
Saskatchewan *		No provincial examination in these years. No report available on success and failure of these pupils									
1922	P					3,479	92	594	94	4,073	92
	F					295	8	37	6	332	8
1923	P					4,817	89	834	89	5,651	89
	F					578	11	104	11	682	11
Total											
1922 and 1923 ..	P	17,445	80	10,094	63	17,327	74	2,435	76	47,301	74
	F	4,265	20	5,952	37	6,062	26	768	24	7,047	26

P means promoted, and F means failed.

* The majority of pupils in Saskatchewan wrote only a partial examination.

The data of this table are based on figures found in the following reports:

Alberta: Seventeenth and Eighteenth Annual Reports of the Department of Education of the Province of Alberta, 1922, p. 32, and 1923, p. 34.

Nova Scotia: Annual Reports of the Superintendent of Education for Nova Scotia, 1922, p. 24; 1923, p. 34.

British Columbia: For 1922 from figures supplied by the Department of Education. For 1923 from the Fifty-second Annual Report of the Public Schools of the Province of British Columbia, 1922-23, p. F. 20.

Manitoba: Report of the Department of Education, Province of Manitoba, 1923, p. 135.

Saskatchewan: Annual Report of the Department of Education of the Province of Saskatchewan, 1923, p. 57.

TABLE 20

Percentage of Pupils Who Passed at the Lower, Middle, and Upper School Examinations, Ontario, 1922, 1923, and 1924

Subject	Per Cent of Pupils Who Passed								
	Lower School			Middle School			Upper School		
	1922	1923	1924	1922	1923	1924	1922	1923	1924
English Grammar	87	86	93						
Canadian History	68	81	91						
Geography	91	91	97						
Physiography	77	92	95						
Arithmetic	78	81	87						
Art	89	94	94						
Botany	88	92	95				85*	86*	68
Zoölogy	95	95	98				85*	89	73
Agri. and Hort. I	89	93	96						
Agri. and Hort. II	94	97	97						
Latin Grammar	87	93	94						
Eng. Composition				93	76	82	99	90	83
Eng. Literature				89	88	83	91	75	87
British History				83	63	69			
Ancient History				75	61	61			
Algebra				64	74	70	70	79	64
Geometry				81	68	62	80	61	70
Physics				80	85	67	98	79	79
Chemistry				80	76	68	78	75	81
Latin Authors				63	68	80	83	77	85
Latin Composition				64	73	67	65	56	80
French Authors				81	88	85	97	89	91
French Composition				79	69	67	72	62	87
German Authors				100*	87*	70*	100*	99*	95*
German Composition				74*	72*	64*	92*	86*	91*
Greek Authors				64*	61*	85*	86*	83*	74*
Greek Composition				74*	76*	76*	81*	80*	80*
Spanish Authors				66*	73*	57*		83*	84*
Spanish Composition				80*	61*	45*		83*	86*
Agri. and Hort. I				92*	84*	81*			100*
Agri. and Hort. II				85*	93*	98*			100*
Italian Authors						75*			
Italian Composition						75*			
History							99	78	80
Trigonometry							89	65	74
Problems								6*	11*

* Where a percentage has been marked with an asterisk there were fewer than 500 candidates for the examination.

The figures for the above table are taken from the Reports of the Minister of Education, Province of Ontario, 1922, pp. 113, 114, 115; 1923, pp. 93, 94, 95; and 1924, pp. 71, 72, 73. The Reports give percentages calculated to two decimal places. The percentages of Table 20 are given to the nearest whole percentage.

make clear the practices with respect to promotion employed by the several provinces represented. In Alberta, promotions were made during the years chosen for illustration on the old plan, a combination of recommendations and provincial examinations, and not as at present by provincial examination solely. No provincial examination was held at the close of grade IX, pupils being promoted on the recommendations of their own schools. At the close of grade X certain of the larger, better-equipped schools were permitted to recommend pupils for promotion, while the pupils of the remainder were required to secure promotion by a provincial examination. At the close of grades XI and XII success at provincial examinations formed the only avenue to advance. The practice in Nova Scotia differs from Alberta and also from every other province. Provincial examinations are held at the close of each grade but failure at such an examination does not necessarily affect the local grading of schools. Failure means that a pupil is not recognized by the Department as having the standing which a pass would give him. Consequently, the failing pupils are not necessarily held back from advancing into the following grade. For British Columbia figures at grades XI and XII only are given. The results in these grades are determined by provincial examinations only. In Manitoba in collegiate institutes only, and for these schools only in grades IX and X, pupils may be promoted on the recommendation of their own schools. Otherwise promotion is secured only by provincial examinations. In Saskatchewan during 1922 and 1923 no provincial examinations were held for grades IX and X. For grades XI and XII of this province provincial examinations were practically the sole mode of advancement.

Referring now to Table 19 which shows the successes and failures on whole examinations for five provinces, these conclusions are warranted: In the first place the mortality, generally speaking, is extremely heavy. In Alberta in grades X, XI, and XII during the two years, there is no percentage of failure less than 30; in Nova Scotia in all four grades there is no percentage of failure less than 39 and the percentage of failure in grade X in 1923 reaches the high total of 57. British Columbia's best record in grade XII (with very few pupils involved) is 38 per cent of failures; Manitoba failed 33 per cent at the close of grade XI in 1922 and 50 per cent in 1923. The average mortality at the close of grade X for these provinces was 37 per cent. The average percentage of failure for all five provinces in all the grades represented for both years was 26, a figure which is large enough to be disquieting without remembering that it is influenced in a favorable direction by the relatively high percentage of success attained by the pupils in Saskatchewan on partial examinations only. None of the provinces under consideration furnishes statistics of the pupils who fail and subsequently pass. The figures for failures include pupils who have failed at the same examination before as well as those who fail for the first time. The figures for successes include pupils who have failed previously and pass on the repeated test, as well as those who pass on their first attempt. Information on this point would be of real importance, not only in making it possible to calculate the net amount of failure, but also in throwing light on the efficacy of repeating a grade.

Further investigation of the mortality at examinations makes the situation no better than at first appears, rather a little worse. The percentages of success in Table 19 do not represent success on all papers of the examination. Some of the pupils in grades XI and XII who in this table are recorded as passed are ''conditioned''[6] in one or two subjects, or in the case of Saskatchewan have written upon a part only of the whole examination. Table 21 shows the numbers in Alberta and British Columbia who were conditioned and the numbers in Saskatchewan who wrote successfully only a part of the whole examination. The presence of these conditioned pupils among the number reported in Table 19 as passed serves to reduce the number who secured passes in all subjects of grades XI and XII in Alberta to approximately 46 per cent (grade XI, 1922) and 43 per cent (grade XII, 1923). In British Columbia the percentages of pupils who received passes in all subjects become approximately 68 (grade XI, 1922), 55 (grade XI, 1923), 38 (grade XII, 1922), and 21 (grade XII, 1923). In Saskatchewan the overwhelming majority of those who passed were successful upon a part of the whole examination merely, and indeed the great majority of the candidates for the grade XI and grade XII examinations attempted no more than a partial examination.[7]

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[6] For example, in British Columbia "at the Junior and Senior Matriculation Examinations (grades XI and XII) a candidate who makes an average of 50 per cent in the aggregate but falls below 40 per cent in *one* or *two* papers is granted the privilege of completing the examination by 'writing off' supplementals in the paper or papers in which he has failed." (Reply from the Department of Education, British Columbia, in response to inquiry.)

Manitoba does not report the number of pupils conditioned. Pupils are, however, permitted to pass into college or into the normal schools with one condition[8] and the number of pupils in the combined "Teachers and Matriculation Course" who had such a condition in the 1923 grade XI examination was larger than the number who had clear passes.[9] The failure percentage for Manitoba which appears as 50 in the grade XI examination in 1923 is, therefore, not exaggerated. There is in Nova Scotia also a provision under which a pupil who makes a high aggregate may fall below the required minimum in one or more subjects.[10]

TABLE 21

NUMBER OF PUPILS IN GRADES XI AND XII WHO PASSED WITH "CONDITIONS" OR PARTIAL STANDING AND THE PERCENTAGE WHICH THESE ARE OF THE TOTAL PUPILS PASSED, ALBERTA, BRITISH COLUMBIA AND SASKATCHEWAN

Province	Grade XI			Grade XII		
	Total No. Passed	No. Conditioned or Partial	Per Cent	Total No. Passed	No. Conditioned or Partial	Per Cent
Alberta						
1922	853	274	32	382	81	29
1923	976	309	32	310	89	29
British Columbia						
1922	1,367	309	23	23	9	39
1923	1,464	436	30	65	38	58
Saskatchewan						
1922	3,497	2,962	85	594	479	81
1923	4,817	4,054	84	834	678	81

This table is to be read thus: In Alberta on the grade XI examination in 1922, 853 pupils passed. Of these 853 pupils 274 or 32 per cent passed with conditions.

The data of this table are derived from the same sources as the data of Table 19.

In the second place, there are instances of extreme variation between the numbers failing in one province and the numbers failing at the same point in another. In British Columbia, for instance, 12 per cent failed at the grade XI examination in 1922 and 21 per cent in 1923, while in Nova Scotia 50 and 49 per cent failed at the grade XI examination in the same years, and in Manitoba 50 per cent failed at the grade XI examination in 1923. This fact tends to make one somewhat skeptical of the general validity of what are frequently called ''standards.'' Even a casual observer unconsciously admits their variability. No one, for instance, would conclude from a comparison of the failure percentage in British Columbia and Manitoba at grade XI in 1923, 21 and 50 per cent respectively, that the British Columbia high schools are as much more efficient than the high schools of Manitoba as the difference between their percentages would indicate. Some difference in efficiency there may be, but it is not impossible that a high school pupil in British Columbia was more fortunate than his fellow pupil in Manitoba, not because he was much better educated but because he had a much better chance of passing.

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[7] Annual Report of the Department of Education of the Province of Saskatchewan, 1923, p. 57.

[8] Programme of Studies for the Schools of Manitoba, 1923, pp. 33 and 34.

[9] Report of the Department of Education, Province of Manitoba, 1924, p. 58.

[10] Journal of Education, Nova Scotia, April, 1925, Section 137 (*d*), p. 39.

The third conclusion is that there is generally a close degree of consistency between the amount of failures within a province at the same examination in successive years. Several exceptions may be found—for example, a difference of 17 per cent between the grade XI results in Manitoba and a difference of the same amount in Nova Scotia in grade XII, differences which are large enough to work rather serious injustice upon the pupils.

From the figures of Table 20 which give the success and failure of high school pupils in Ontario, it will be observed that results are reported by subjects and not by whole examinations. This practice results from a provincial regulation providing that pupils may pass provincial examinations by writing ''one or more papers at any time and in any order as approved by the principal.''[11] Table 20 gives percentages of pupils who passed for each subject separately at the Lower School, Middle School, and Upper School examinations in 1922, 1923, and 1924, with this exception that owing to the abolition of the provincial Lower School examination in 1923, the passing percentages in 1922 at this examination represent success upon a provincial examination, while the percentages in 1923 and

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[11] Department of Education, Courses of Study and Examinations of the High Schools, Collegiate Institutes, and Continuation Schools, Revised, 1924, p. 75.

1924 represent success as determined by the teachers and principal of a pupil's school. It may also be repeated here that the pupil in the province of Ontario at the close of the Middle School (normally his fourth year) has reached relatively the same point in his high school course as the pupil in other provinces at the close of grade XI, that is, the first point of entry into the colleges and normal schools.

These examination results for Ontario, reported as they are by separate papers, are not comparable with the results given for the five provinces which have just been considered, and any discussion of their results must be drawn from comparisons found within the table. A rearrangement of the data according to the frequency with which various percentages of success are found results in Table 22. This rearrangement is, of course, subject to the statistical irregularity that the percentages of success are not in every case based upon the same number of pupils and to that extent are incomparable with one another. The Lower School examinations, for instance, are tried by larger numbers than either the Middle or Upper School examinations, and since the percentages of success in the Lower School are greater than at subsequent examinations, any central tendency of success drawn from the whole distribution will be somewhat too small to represent exactly the percentage of suc-

TABLE 22

PERCENTAGES OF SUCCESS AT PROVINCIAL EXAMINATIONS IN ONTARIO, 1922, 1924, DISTRIBUTED ACCORDING TO THE FREQUENCY OF OCCURRENCE AT THE LOWER, MIDDLE, AND UPPER SCHOOL EXAMINATIONS

Percentage of Success	Lower School	Middle School	Upper School	Total
90-100	21	5	14	40
80-89	9	19	25	53
70-79	2	16	14	32
60-69	1	20	6	27
50-59		1	1	2
40-49		1		1
	N=33 Median=92.14	N=62 Median=75.63	N=60 Median=83.60	N=155 Median=82.92

The results of the examination on "Problems" are not included.

cess at all examinations for all pupils concerned. With this qualification the new arrangement indicates clearly that failures are most numerous at the Middle School examination, less numerous at the Upper School examination, and fewest in the Lower School by a considerable difference.

The median of the column of totals (82.92) indicates that the percentage of success at Ontario examinations is on the average 83 per cent or a little less, and that the percentage of failure is on the average 17 per cent or a little more. At the Middle School examination, and this is the most important examination of the three, being the examination which closes the high school course for the majority of pupils and also serves for the majority of those who continue at school as the method of admission to college, the median (75.63) indicates that on 50 per cent of the examinations at this point the percentage of failure is approximately 24 per cent or more.

TABLE 23

PERCENTAGE OF SUCCESS AT PROVINCIAL EXAMINATIONS IN ONTARIO, 1922, 1923, 1924, DISTRIBUTED ACCORDING TO THE FREQUENCY OF OCCURRENCE IN CERTAIN IMPORTANT SUBJECTS

Percentage of Success	English	Mathematics	F'reign Languages	Science	History	Agri. & Hort.	Art	Geography	Totals
90-100	5		10	8	2	10	2	3	40
80-90	8	6	22	9	3	4	1		53
70-79	2	7	14	7	2				32
60-69		5	14	3	5				27
50-59			2						2
40-49			1						1
N	15	18	63	27	12	14	3	3	155
Median	86.86	75.71	80.23	83.89	75.00	93.00			82.92

English includes grammar, composition, and literature.
Mathematics includes arithmetic, algebra, geometry, and trigonometry.
Foreign languages include Latin, French, German, Greek, Spanish, and Italian.
Science includes physiography, botany, zoölogy, physics, and chemistry.
The remaining column headings are self-explanatory.
The results of the examinations in "Problems" have not been included.

A second rearrangement of Table 20 in which the percentages of success are distributed by major subject groups is given in Table 23. From this distribution it appears that the median percentages of success for the more important high school subjects are as follows: English 86.86; mathematics 75.71; foreign languages 80.23; science 83.89; history 75.00; agriculture and horticulture 93.00. The heaviest mortality occurs in mathematics and history. It would appear that the subject matter, the methods of teaching, and the character of the examinations in these two fields should be subjected to close scrutiny. In the case of mathematics, it is also possible that many pupils are required to take algebra and geometry who might be employing their time more profitably in other studies.

In concluding the discussion of the Ontario examinations, it is worth while pointing to an interesting feature of the Lower School results. It will be remembered that in 1923 the plan of promoting pupils at this point on the recommendation of teachers and principal was initiated. The 1922 figures represent, therefore, successes upon a provincial examination; the 1923 and 1924 figures are results as determined locally. In every subject the percentage of success has risen perceptibly when pupils have been examined in their own schools.

PROVINCIAL EXAMINATIONS SHOULD BE FURTHER REDUCED

In the first place, while commendable progress has been made in many provinces in relieving pupils of provincial examinations during their high school course, the recent decision of Alberta already referred to, by which provincial examinations were instituted for all pupils at the close of every grade, shows that the question is not to be considered closed. The kind of learning which may be tested by a provincial written examination is at best narrowly informational, while the classroom teacher who works with a pupil from day to day should be able to estimate his capacity and achievement upon a wider and more satisfactory basis. Provincial examinations held at the close of every grade keep this narrow objective constantly before teacher and pupils. Freedom of teaching is sacrificed to a constant demand for uniformity, and the responsibility of the school is diminished by an annual examination conducted by the central authority. The objection to a constantly recurring series of written examinations conducted by an external authority cannot be answered on pedagogical grounds.[12] One great difficulty in the Canadian situation is provided by the thousands of high school pupils who, as was shown in Chapter IV, are receiving their education in graded and ungraded elementary schools under teachers sometimes indifferently qualified, often charged with teaching all the subjects of the high school course, sometimes expected to teach all the elementary school subjects as well. A provincial examination offers one means, though a poor one, of keeping these schools up to the mark. The action of Alberta in placing provincial examinations at every grade was apparently designed, in part, to meet such a situation.[13] The right solution, as has already been argued in another connection, lies in increasing the size of the local units of administration for secondary education to a point where a responsible secondary school can be conducted.

THE CAUSES OF FAILURE

The causes of failures are many and do not operate singly. They reside in (1) the character of the instruction, (2) the character of the curriculum, (3) the capacity and aptitudes and industry of the pupil, (4) the character of the test. There is little objective evidence to show the effect of any one or more of these factors. The discussion must be mainly based on general principles.

(1) The character of the instruction: Repeated reference has been made to the large numbers of pupils in rural areas who are taught in small groups often by ill-qualified teachers. The conclusion is unavoidable that the training of the pupil is frequently unsatisfactory. There is some evidence to support this conclusion from the Province of Manitoba. In 1923 at the grade XI examinations of the pupils who had received their training in collegiate institutes, 28⅔ per cent failed, while the percentage of failures in the province as a whole was 48⅔.[14] The percentage of failure in the schools other than collegiate institutes, that is, the smaller schools, must have been well over 50 per cent. This wide discrepancy between the larger and the smaller schools strongly indicates that provincial

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[12] For an indictment of provincial written examinations see Spence, Ruth Elizabeth, Education as Growth, Chapter V.

[13] Seventeenth Annual Report of the Department of Education of the Province of Alberta, 1922, pp. 25 and 64.

[14] Report of the Department of Education, Province of Manitoba, 1924, p. 60.

departments should group their examination results according to the type of school in which the pupils were prepared. Further information in this respect is not available.

(2) The character of the curriculum:

(*a*) Length of the high school course: There is a growing conviction that the three-year high school course is too short for pupils adequately to master the work required. In commenting upon the failures in Manitoba, the Registrar remarks that "perhaps it is true that we are trying to cover in three years what really requires four years."[15] The authors of the British Columbia Survey recommended adding a year to the high school course in that province:[16]

> It seems to us that this change is imperative. Everywhere throughout the Province we are told that the present high school course is too heavy; that the work is not thoroughly done; that the burden of home work upon the student is oppressive and that the young people are entering the normal schools and the University immature and ill-prepared.

In Saskatchewan, as has already been noted, the great majority of pupils only write a partial examination at grades XI and XII, a practice which is equivalent to lengthening the high school course. In this province the failures are comparatively very light.

(*b*) Character of the subject matter itself: It is probable that a more vital organization of subject matter, stimulative of greater interest and effort on the part of pupils would lower failures. No programme of studies can ever be devised which would be free from criticism in this respect. The high percentage of failures in Ontario in history, however, indicates that revision of the material within subjects would be a profitable line of endeavor. Much more evidence of an objective kind is needed. The result of examinations for instance should be reported by provincial departments by individual subjects.

(3) The capacity, aptitudes, and industry of the pupil: It would be placing too great trust in human nature to expect that

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[15] Report of the Department of Education, Province of Manitoba, 1924, p. 59.

[16] Province of British Columbia, Survey of the School System, p. 115.

failures can be reduced to zero. Even with the most sympathetic and progressive school organization that could be set up, it is to be expected that a few pupils would properly be penalized by failure for work that was much below their best. At the same time when it has been so convincingly argued by Dewey [17] that the conditions which call forth genuine interest are the best guarantee of intelligent effort, the educator will make a more fruitful attack upon the problem of failures by bringing studies into line with the pupil's interest, aptitudes, and capacity, rather than by putting the blame upon the pupil's willful lack of industry. In a later chapter it will be shown that for the Dominion generally and for many provinces in particular mathematics easily occupies first place as measured by a unit which combines the time devoted to it and the number of pupils studying it.

Mathematics is a highly abstract subject, and the pupil of less than average capacity will have great difficulty in mastering it.[18] We need have little hesitation in saying that many pupils are pursuing studies for which they have inadequate capacity and little interest, owing to the lack of provision of other subjects better suited to their abilities and their needs, the prestige of the traditional curriculum, and other reasons.

(4) The character of the test: When a large number of pupils are writing upon any examination, the percentage of failures from year to year should vary only slightly. Although the amount of failure at the various examinations is usually rather constant, instances can be cited (e.g., Ontario Middle School British history) of divergence from one year to the next of as much as 20 per cent. Such divergences argue that occasionally large numbers of failures may be the result of variation in the character of the test. Provincial examinations in Canada are regularly of the so-called ''essay'' or ''subjective'' types. More reliable methods of measurement are in many subjects already available, and competent examiners such as provincial departments are in a position to employ should be able to secure a high degree of consistency in their results. As long as provincial examinations hold the important place which they now occupy, no pains should be spared to make these tests as valid and reliable as modern research can guarantee.

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[17] Dewey, John, Interest and Effort in Education.

[18] Cf. Thorndike, Edward L., The Psychology of Algebra, pp. 36 and 37.

SUMMARY

The high schools of Canada are still largely controlled by a system of provincial examinations, universally found at the close of the high school course, frequently at the end of every year. Recent changes point to a relaxation of the grip of provincial examinations particularly for the better-equipped schools. This movement, it was argued, should be carried forward as rapidly as possible. The amount of failure found points to a serious degree of maladjustment of the school to its pupils. All provinces are not equally open to criticism in this respect, but the general situation is one to cause real concern over the efficiency of the high schools. In five provinces over a period of two years 26 per cent of the pupils failed to secure a passing mark. In three of these provinces the percentage of failure at the close of grade X was 37. At the grade XI and XII examinations in the same provinces failures of 30 to 50 per cent were the rule rather than the exception. In Ontario at the Middle School examinations 50 per cent of the papers over a period of years resulted in failure percentages of 24 or more. Although the great majority of pupils have been admitted to high school through success at a provincial examination, they fail in their high school work in ever-increasing numbers through the succeeding grades. The evidence available suggests that the character of the instruction in the smaller schools, the crowded three-year high school course, the formal character of the curriculum, and variation in the character of the tests are factors which, either singly or in conjunction, are the causes of much of the serious amount of failure which has been shown to exist.

CHAPTER VIII

ARTICULATION WITH HIGHER SCHOOLS

Introduction

Methods of entrance to college (including normal schools) are obviously designed to select those young men and women who will profit most by what the college has to teach. Looking at college entrance requirements in this light, the only questions which arise are whether the preparation demanded and the methods of testing the candidate's fitness do in fact find the good college student. It is perhaps less obvious that colleges, in setting their entrance requirements, have any duty toward the welfare of the secondary school system in general. But just as soon as it is admitted that the courses required for entrance to college are not necessarily those which are best for a pupil who is not going to college, when further it is clear that the great majority of pupils in the high schools will not go to college and that this number is likely to increase rapidly, when finally account is taken of the hundreds of secondary classrooms which can scarcely provide more than a college preparatory curriculum, then the question of college entrance requirements takes on a broader scope and can hardly be considered apart from the general welfare of the whole plan of secondary education.

Thus the present chapter will deal briefly with the methods of selection in the narrow sense, and at somewhat greater length with the question of the effect of the present college entrance requirements upon the secondary school system in general.

The Machinery of College Entrance

Within any province the method of entrance to college is comparatively simple. The Department of Education conducts annual examinations at the close of the high school course. The universities and normal schools admit pupils who attain the required standards upon a stated series of courses. The normal schools are under the control of the Departments, with the result that subjects required for entrance to the normal schools simply become a part of the high school program of studies issued by the Department. Between the Department, which prescribes the high school program, and the universities, which desire certain preparation from their prospective students, there is usually close coöperation either of a formal or of an informal character.

The formal type of coöperation may be illustrated by the practice in Alberta where a High School and University Matriculation Examinations Board, composed of nine persons, four appointed by the University of Alberta, four appointed by the Department of Education, and a chairman, who is the Deputy Minister of Education, have under their control the conduct of the examinations at the close of the elementary school course and at the close of each year of the high school course.[1] The informal type of coöperation is found in Saskatchewan where the Department of Education controls the examination, but selects members of the staff of the University to form a considerable proportion of those who set the papers.

When a student seeks entrance to a university outside of the province in which he went to school, he presents the certificate earned at his own provincial examination, and this is accepted *pro tanto* by the university. The universities of the Dominion regularly state in their published requirements for admission that they accept *pro tanto* the certificates gained in other provinces.

WRITTEN EXAMINATIONS FURNISH THE REGULAR TEST FOR ADMISSION

To both universities and normal schools success at provincial written examinations form the regular means of admission. The only university which has tried the experiment of admitting students from accredited public high schools of its province by certificate is the University of Saskatchewan.[2] This plan was initiated in 1919. The schools from which students might be accredited were limited to the collegiate institutes. After five years of operation the plan had ''not taken very deep root in the Province,'' having operated successfully only in connection with the collegiate institute in Saskatoon, the city in which the University of Saskatchewan is situated. That the scheme has not received a more cordial reception in Saskatchewan has been attributed by Dean George H. Ling of the University of Saskatchewan to two causes, mainly: (1) the traditional respect in Canada for written examinations, and (2) the fact that the provincial examinations system was retained for students seeking admission to the normal schools. The second of these causes requires a little further explanation. Students writing the provincial examinations at the close of grade XI are able if they have selected the necessary subjects, to secure double qualification, both admission to the University and admission to the provincial normal schools. Many students were unwilling to forego the advantages of this double qualification through accepting the method of admission to the University by certificate. It is interesting to note that in this case the University has been more willing to experiment than the school system.

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[1] Information from the Registrar of the University of Alberta.

[2] George H. Ling, Dean of the Faculty of Arts, University of Saskatchewan, one of the sponsors of the plan, furnished information regarding its operation up to 1924.

THE SINGLE BASIS OF ADMISSION IS EMPLOYED

Generally speaking, the results of subject matter examinations form the single important basis for admission to college. It is true that some colleges require that the candidate have reached a minimum age, usually sixteen. It is also true that some colleges require that the student furnish a certificate of moral character. In the case of the examinations themselves it is the practice in Alberta, for the provincial examiners to call for supplementary information about the candidate, including length of time preparing for examination, regularity of attendance, attitude toward work, general grasp of each subject, physical fitness for examination, and chances for passing. Where possible, percentages based on the candidate's work during the year are also requested.[3] Such information would doubtless be useful in making allowances for borderline cases. On the whole, however, success at subject matter examinations may be called the single basis for admission to college.

Percival M. Symonds in a recent book [4] has collected the results of a considerable number of studies on the prediction of success in college by means of high school marks, psychological examinations (intelligence tests), and subject matter examinations both singly and in combination. The total impression of these studies leads him to conclude in the first place that "no one factor predicts college success adequately and that any criterion of college success should be the composite of several objectively measurable factors."[5] Among the three factors taken singly for the prediction of college success, he places high school marks first, intelligence tests second, and subject matter examinations third. This ranking of the first and third factors applies to success in college courses of an academic rather than a technical kind. The results of such studies[6] in the United States should suggest to Canadian university authorities that the reliability of their methods of selecting students could be considerably improved by considering additional objective factors. It may be argued that the need for selection is not yet so acute in the Canadian universities as it is in those of the United States. However, the amount of failure which occurs at the Canadian examinations which conclude the high school course (see Chapter VII) shows that a strong selective influence is now at work, and it would appear that in justice to the pupil and for the good of the college which may admit him as a student, the selection by the college should be made on as wide a basis as possible.

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[3] Regulations of the Department of Education relating to Programmes of Studies and Annual Examinations for Secondary Schools, 1926, p. 3.

[4] Symonds, Percival M., Measurement in Secondary Education, Chap. XX.

THE EFFECT OF COLLEGE ENTRANCE REQUIREMENTS UPON THE CURRICULUM

It is not uncommon to hear complaints that college entrance requirements exert an undue domination over the secondary schools. In so far as this criticism refers to the close prescription of subject matter enforced by formal written examinations, there is no reason to direct criticism at the colleges in particular. Such is the general policy of provincial departments of education through all or part of the high school course. From another point of view, however, college entrance requirements may dominate the secondary school. Colleges may make such extensive requirements for entrance that the schools in general can do little more than meet these, and the prospective college student may find little or no time for studying any other subjects than those which are found on the college entrance list.

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[5] Symonds, Percival M., Measurement in Secondary Education, p. 425.

[6] *Ibid.*, pp. 425 and 426.

To illustrate the effect of college entrance requirements upon the curriculum of the high schools in general, Table 24 has been prepared which shows the situation in Ontario. Here as elsewhere in the Dominion, the high schools have three important requirements to meet: (1) subjects which the Department requires that all pupils shall take, (2) subjects which are required or optional for entrance to the normal schools, and (3) subjects which are required or optional for entrance to college.[7] Table 24 indicates these requirements by figures placed opposite the subject and under the appropriate column heading. A figure shows that the subject is required or optional and also the number of years which are prescribed.[8] From the last two columns of the table showing the percentages of the total enrollment studying each of the subjects in high schools and collegiate institutes and in continuation schools, the effects of the requirements upon the curriculum of both kinds of schools can readily be discerned.

This table suggests three conclusions: (1) The subjects required or optional for entrance to the universities and normal schools together with the subjects required of all pupils are the major determinants of what pupils will study. Subjects which fall outside this list are studied by very small percentages. (2) The smaller the school the more strictly do the requirements govern the curriculum. The continuation schools show smaller percentages of pupils studying the extra subjects than the high school and collegiate institutes. (3) Among the optional subjects the schools show a tendency to select some subjects and to neglect others. French is highly favored among the languages, and agriculture is neglected among the sciences. The low position of agriculture, which, so far as requirements go, stands on the same basis as botany, zoölogy, physics, and chemistry, seems to show a conservative tendency in the schools themselves.

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[7] The sources from which these requirements are taken will be found in the notes on Table 24. It should be noted that in the most recent (1927-28) matriculation requirements in Ontario music has become optional with ancient history.

[8] The numbers of years over which the prescriptions operate are derived from the Course of Study cited in Table 24 and also from the time-table of a typical Ontario high school which will be found in Chapter XI.

TABLE 24

SUBJECTS PRESCRIBED FOR ALL PUPILS AND FOR THOSE SEEKING ADMISSION TO THE UNIVERSITIES AND NORMAL SCHOOLS, TOGETHER WITH THE PERCENTAGE OF THE TOTAL ENROLLMENT STUDYING THEM, ONTARIO, 1924

Subject[1]	Required No. of Years			Optional No. of Years		Per Cent of Total Enrollment Studying	
	For All Pupils[2]	For Entrance to the Universities[3]	For Entrance to the Normal Schools[4]	For Entrance to the Universities[5]	For Entrance to the Normal Schools[6]	In High Schools and Collegiate Institutes[7]	In Continuation Schools[7]
English Grammar					1	20.07	22.55
English Composition and Rhetoric	4	4	4			95.83	96.68
English Literature	4	4	4			96.64	98.69
Canadian History	1		1			36.44	40.99
British History		1	1			21.17	21.97
Ancient History		1	1			14.98	20.92
Modern History[8]						3.69	
Geography			1			33.54	38.61
Physiography	1		1			24.31	28.61
Arithmetic and Mensuration			1			28.36	31.44
Algebra	1	2-3	2-3			40.61	50.83
Geometry	1	2	2			44.79	48.74
Trigonometry[8]						4.37	
French				4		80.46	68.52
Spanish				?		.41	
German				2-3		3.52	
Latin		4			4	75.11	65.32
Greek				?		.66	
Zoölogy					1	17.41	30.59
Botany					1	24.26	35.01
Chemistry				1+	1+	17.56	19.93
Physics				1+	1+	18.98	19.27
Bookkeeping						7.72	.52
Stenography						4.78	.41
Typewriting						4.46	.65
Art			1			24.54	38.32
Physical Culture	*all*					95.95	95.12
Commercial						4.74	
Agriculture				2	{1,2,3 *or* 4}	4.59	2.61
Manual Training						7.28	
Household Science						7.64	.21
Art (Middle School)						.23	.45

NOTES TO TABLE 24

[1] The subjects are listed as found in Report of the Minister of Education, Province of Ontario, 1924, Continuation Schools, III. Table J, pp. 170-83, and Collegiate Institutes and High Schools, III, Table N, pp. 218-33.

[2] Department of Education, Courses of Study and Examinations of the High Schools, Collegiate Institutes, and Continuation Schools, Revised 1924, pp. 7, 8, 9.

[3] *Ibid.,* p. 78. The prescriptions for Pass Matriculation are given in the table.

[4] *Ibid.,* p. 77. The prescriptions for admission to the course for the Second-Class Public School Certificate are given in the table.

[5] The options allowed are two of: Greek, French, German, Spanish or Italian, science (physics and chemistry, or agriculture and horticulture). The pupil thus must take a second language. (*Ibid.*, p. 78.)

[6] In the Lower School the pupil may take any two of botany, zoölogy, agriculture (first year), agriculture (second year). In the Middle School the pupil may take any two of physics, chemistry, agriculture (first year), agriculture (second year). The pupil must pass either in English grammar of the Lower School or in Latin grammar of the Lower School or Latin composition of the Middle or Upper Schools. (*Ibid.,* p. 77.)

[7] Figures derived from the tables cited in note 1.

[8] These subjects are given in the Upper School only.

The effect of college entrance requirements (including normal entrance requirements) upon the curriculum of the high schools of Ontario may, without fear of error, be extended to the country as a whole. Indeed, in other provinces where the high school system is on the whole less highly developed than in Ontario and where the sparsity of population creates a comparatively larger number of very small high schools, the effects are likely to be even more marked. It is true that in Ontario the situation is mitigated somewhat by the growing number of vocational schools and departments, the studies of which are not included in the previous table. Full-time day vocational pupils formed about 14 per cent of the total high school enrollment in 1925.[9] In other provinces this mitigating factor would be on the whole less apparent. It is therefore apparent that secondary education in Canada is predominantly college preparatory.

While the high school is predominantly college preparatory in its curriculum, it is at the same time certain that only a small fraction of high school pupils will go on to the universities or to the normal schools. It has already been shown in Chapter V that of 100 pupils who enter high school only 40 are enrolled in grade XI. There are no exact data to show how many of these 40 pupils reach the colleges and the normal schools. One-half would certainly be too high an estimate. It would doubtless be a liberal estimate to say that one-sixth of the pupils who enter high school eventually go on to some higher institution of learning. That the high school curriculum should be mainly determined in the interests of one-sixth or fewer of its pupils is justifiable only on the grounds that the college preparatory courses are also those which are best as a more immediate preparation for life. The predominantly formal trend of high school studies as they at present exist (see Chapter XI) would seem to make this position untenable.

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[9] Derived from figures given in *Aperçu Annuel sur l'Instruction Publique au Canada,* 1925, p. 48.

There is no doubt that the present movement toward the establishment of secondary vocational schools (see Chapter IV) is one important direction in which a better adjustment of the secondary system to the needs of its pupils is to be sought. At the same time this movement is affecting to a considerable degree only the larger centers of population (see Table 7). The smaller places cannot at present use this means. It seems, therefore, that the colleges should most seriously consider the effect of their entrance requirements upon the small school until such time as, through consolidation or through the extension of the period of secondary education or both, the high schools outside of the populous centers can bring about a more adequate differentiation of their courses.

In the case of the individual pupil preparing for college, the requirements which all pupils must meet, together with the requirements of the college preparatory curriculum, will occupy a large proportion of his school time. From the time-tables given in Chapter XI and from the statement of the requirements which the pupil must meet, it is possible to estimate rather closely the proportion of a full working day which a pupil will have to spend. Let us make this estimate first of all for Ontario where the basic course is four years. Suppose that 7 class periods a day of 40 minutes each constitute a full working day for a pupil—and this must be considered a very heavy programme. Such a programme will give the pupil 35 periods a week, and in a four-year course he will have what may be called 140 week-periods. Calculating now the week-periods entailed by the subjects prescribed for all pupils and by the additional subjects required in a typical curriculum[10] for entrance to the university in four years, the following estimate may be made:

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[10] See Chapter XI.

Subject	Week-Periods
English	22
Latin	18
French	16
Algebra	11
Geometry	10
Physiography	4.5
History	13
Physics	6
Chemistry	6
Physical Education	9
Total	115.5

From this estimate it is clear that in Ontario a pupil going to a university may meet the requirements with approximately 115.5 week-periods and still keep within the rather burdensome limits which have been put at 140 week-periods. Or the pupil might even add to his college preparatory course each year a subject studied 5 periods a week and still be just within the limits of a possible programme.

Where, however, the high school course leading to entrance to the university is completed in three years, as is the general practice outside of Ontario, the situation is much more acute. The Province of Manitoba will furnish an instructive example. Taking as before 7 periods a day as the limits of a reasonable programme, a three-year course gives $7 \times 5 \times 3 = 105$ as the week-periods available. Entrance to the University of Manitoba may be gained by completing the following course:[11]

1. English	3 years
2. History	3 years
3. Mathematics	
a. Arithmetic	2 years
b. Algebra	2 years
c. Geometry	2 years
4. Latin or Greek or French or German	3 years

5. A language not already taken in "4" above, 2–3 years (approx.) *or* two sciences from the following list: General Science I, General Science II, Physics, Chemistry.

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[11] Programme of Studies for the Schools of Manitoba, 1927, p. 16 ff.

6. A language not already taken in "4" or "5," 2–3 years (approx.) *or* two sciences not already taken in "5" with one of the following: Home Economics, Industrial Arts, Music, Agriculture, Commercial work.

This course with its various options may now be stated in terms of week-periods. The time-table of a Manitoba collegiate institute given in Appendix D furnishes the data for estimating the week-periods required. Table 25 presents the results in concise form. Ninety-eight week-periods is the lowest estimate; 109 is the highest, though the latter is probably subject to some reduction because it is hardly likely that a pupil would begin a third language until his second year. None of the estimates makes any allowance for physical education. The week-periods required for the last option, 6 (*c*), cannot be exactly calculated from the data available.

From this analysis it may be seen that the pupil in Manitoba going to the University is required to do in three years just about what the Ontario pupil has four years to complete. It cannot therefore be doubted that university matriculation requirements which are similar throughout the country as a whole are excessively burdensome in those provinces where the three-year course prevails. The conclusion arrived at in Chapter VII, that the shortness of the high school course is one cause of the excessive amount of failure, finds, therefore, strong confirmation in the facts adduced in the present chapter.

There can be little doubt from what has already been said that the requirements for entrance to college exert a strong influence over what the schools teach and in the case of individual pupils, at least outside of Ontario, exert a very burdensome pressure upon the pupil. Two obvious ways of relieving the pressure are open: either modifying the college entrance requirements, or increasing the length of the high school course. The first method would doubtless produce some valuable readjustments. In Manitoba, for example, the requirement of two years of arithmetic seems to lack any reasonable justification. At the same time it seems just that the colleges should expect from their entrants a broad acquaintance with the elements of the major fields of learning and also in some fields continuous preparation over several years. As long as the requirements for entrance to college are to be fulfilled in three years, it would appear to be very difficult fundamentally to alter the present situation. A considerable lengthening of the high school course seems imperative if a wider variety of subjects

TABLE 25

MATRICULATION REQUIREMENTS IN MANITOBA, SHOWING THE WEEK-PERIODS OF STUDY NEEDED TO COMPLETE THE THREE-YEAR COURSE

Subject	No. of Periods per Week over Three-Year Course	Cumulative Total of Periods per Week over Three-Year Course	Remarks
1. English	28	28	
2. History	12	40	
3. Mathematics	24	64	
4. A Foreign Language	15	79	
5. (*a*) A second foreign language	15	94	
or			
(*b*) Two science courses	7 or 12	86 or 91	7 periods per week for physics and chemistry. 12 periods per week for general science I and general science II.
6. (*a*) Another foreign language	15?	109?	If the pupil elects 5(*a*) and 6(*a*), a third language would probably be allotted fewer than 15 periods. Hence the?
or		101 or 106	If the pupil elects 5(*b*) and 6(*b*).
(*b*) Two science courses	12 or 7	106 or 101	If the pupil elects 5(*a*) and 6(*b*).
or		98 or 98	If the pupil elects 5(*b*) and 6(*b*).
(*c*) One science course and one elective	?	?	The number of periods to ascribe to the elective cannot be exactly determined.

is to be introduced and if the undue pressure upon the pupil is to be relieved. This conclusion accords well with those already reached in Chapters VI and VII. It appears that immediate steps should be taken to make the basic high school course four years to include grade XII and that a further extension downward to include grades VII and VIII should be seriously considered.

SENIOR OR HONOR MATRICULATION

What has been said hitherto refers to articulation with higher schools at the close of the basic three- or four-year course. High schools may also be in articulation with the universities and normal schools at the end of grade XII or the Upper School (in Ontario). This extra year, where high schools are able to give it,[12] is used in one or more of three ways: (1) to give standing equivalent to that held by students at the end of their first year in the ordinary Arts course, (2) to give additional preparation for entrance to professional schools, and (3) to provide a period of additional preparation for entrance upon an honors course in Arts. By this means high schools are being stimulated to lengthen their course to four or five years, and there is the further advantage that, in the case of preparation for an honors course, the pupil is able to direct his studies so that in the university he proceeds with advanced work along lines for which he has laid a considerable foundation.

SUMMARY

In the present chapter it has been shown that the high school curriculum is predominantly preparatory for college (including normal schools) in its trend, and that this influence has a greater effect upon the small schools than upon the large ones. It has also been shown that in a three-year high school course university entrance requirements are so heavy as to lay an undue burden upon the pupil. In view of these facts and those already brought out in Chapters IV, V, and VII relative to the large number of very small schools which carry on secondary studies, the rapidly increasing high school population, the progressive elimination from the high school grades, and the large amount of failure at high school examinations, it has been urged that colleges seriously consider the effects of their requirements upon the small school and that, fundamentally, the high school course should be lengthened in order to relieve pressure and to provide more time for subjects better suited to those who are not going to college.

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[12] In 1925 there were about 8,000 pupils in grade XII and the Upper School and about 30,000 in grade XI and the second year of the Middle School. The numbers cannot be accurately given.

In reviewing the methods of selection for entrance to college, it was found that success at subject matter examinations is the important single basis. In this connection it was urged that experimentation with other measurable factors should be undertaken.

CHAPTER IX

TRAINING OF HIGH SCHOOL TEACHERS

Introduction

In the development of teacher training in Canada, the professional training of high school teachers has been seriously neglected until recently. Outside of Ontario at the University of Toronto, and the Protestant system of Quebec at McGill University, university graduates who planned to become high school teachers obtained such professional training as the provincial normal schools could find time to give them during a period of time lasting for a few weeks or a few months at best. The western provinces were busy with the task of providing trained teachers for their rapidly expanding elementary school systems; the Maritime Provinces, apparently, regarded the professional training of university graduates as a matter of small concern.

During the present decade, however, a decided tendency has appeared to put the professional training of high school teachers upon a sounder footing. Courses in the normal schools for university graduates have in some cases been lengthened; in British Columbia the professional training of university graduates has been removed from the normal schools and entrusted to the university, and in Nova Scotia the universities have organized a recognized training course in place of the six-week normal course which was formerly sufficient. The growth of vocational education at the secondary level has also aroused the provinces to the necessity of securing professionally trained teachers competent to instruct in these new fields. The movement to provide professional training for technical teachers is just beginning, but it will doubtless gain in importance as vocational education becomes more firmly established and as the best methods of training vocational teachers are worked out.

The present chapter will deal with two topics: (1) the professional training of university graduates (including those whose professional training is undergraduate as well as those whose training is postgraduate) in the universities, and (2) the professional training of secondary vocational teachers. In limiting the discussion to these two topics, it has not been forgotten that high school pupils are found in larger or smaller groups in almost every type of public school, working under teachers with almost every kind and amount of training. It would be a profitable undertaking to secure an accurate account of the status and training of all the teachers who have high school pupils under their care, but the detailed facts for such a description have still to be gathered. Neither has it been forgotten that some provinces still employ the provincial normal schools for the training of their university graduates. This practice, however, is decreasing rather than increasing and in the opinion of the writer it appears to be a temporary expedient which may be expected to disappear as soon as suitable arrangements can be made for organizing professional training in the provincial universities.[1]

TRAINING OF HIGH SCHOOL TEACHERS IN THE UNIVERSITIES

In four provinces, British Columbia, Ontario, Quebec (Protestant system), and Nova Scotia the training of high school teachers is now carried on by the universities. These four provinces may be divided into two groups. In one group (Ontario and British Columbia) professional training is postgraduate; in the other (Nova Scotia and Quebec) it is given concurrently with the student's undergraduate course.

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[1] Alberta, Saskatchewan, and Manitoba still send their university graduate group to the normal schools for professional training. The normal schools are one-year institutions designed primarily for giving to high school graduates professional training for elementary school teaching. In the winter of 1924 the writer sent a questionnaire to ten provincial normal schools asking for information relative to the training given to university graduates in 1922-23. From seven replies received the following information is pertinent here. In the majority of normal schools replying, it had been possible to segregate the university graduates into separate class sections and to give them some instruction in the teaching of high school subjects. The amount of observation and practice teaching required in the high school grades was on the whole negligible. It appeared that the normal schools were doing their best to meet a demand for which they had indifferent facilities. One of the provinces (Nova Scotia) which was represented in the replies received has since that time abandoned the normal school for the universities. A second (British Columbia) was in process of making the same change during the year concerning which information was sought. Since this note was written, Saskatchewan and Alberta have transferred training courses for secondary teachers to the universities.

The Postgraduate Plan (Ontario and British Columbia)

Ontario.—The professional training of high school teachers in Ontario is carried on by the Ontario College of Education which is the professional school of education of the University of Toronto. The statute under which the College of Education operates places the College under the control of the Minister of Education,[2] i.e., the Ontario Department of Education. The Minister has the power to erect and maintain buildings, appoint officers and instructors, prescribe courses, and grant certificates. The expenses of the College are to be met by legislative appropriation. The Minister has also the power to provide for the affiliation of the College with any university, and to make arrangements by which any elementary or secondary school may be used as a practice school.

In the calendar of the University of Toronto with which the Ontario College of Education is affiliated the position and functions of the Ontario College of Education are thus described: [3]

> The Ontario College of Education is the University's professional school of education. It trains candidates for diplomas and certificates as teachers and in particular for Provincial certificates as teachers of Art, Household Science, and Physical Culture, as High School Assistants and Specialists and as First-Class Public School teachers. It also offers courses for the B.Paed. and D.Paed. degrees.

Under the constitution and administration of the University [4] the Ontario College of Education is one of seven faculties including arts, medicine, law, etc., which are subject to the Senate of the University in matters which are mainly instructional and to the Board of Governors in matters relating to appointments to the staff and the general management of the University. It is clear that as between the statute already summarized and the authoritative statements of the University there are grounds for doubt as to where the actual control of the College of Education lies. It would appear also that there are grounds for serious conflict between the University and the Ontario Department of Education.

The Dean of the College of Education has furnished information[5] regarding the administration of the College which indicates how this source of conflict is avoided. Budgets, appointments to the staff, courses of study, etc., are subject, *in so far as they are concerned with training for Ontario certificates,* to the approval of the Minister of Education. With respect to these courses of study the University determines them and the Minister approves them. In practice the staff of the College of Education and the Director of Professional Training—an official of the Minister—prepare the courses. On the other hand, all courses of the College of Education other than those for Ontario certificates, i.e., courses for special students, courses leading to B.Paed., D.Paed., M.A., and Ph.D. degrees are instituted and controlled by the College of Education as a faculty of the University.

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[2] The School Law Amendment Act, 1919, s. 6.

[3] Calendar of the University of Toronto, 1925-26, p. 570.

[4] *Ibid.*, pp. 75 ff.

It will be observed that the actual plan of operation is a compromise by which the Provincial Department of Education exerts an active influence upon the nature of the courses, the appointments to the staff, and the budget only in so far as these are concerned with the preparation of students specifically for Ontario teaching certificates, while the additional work carried on by the College of Education is under the management and control of the University authorities.

The Ontario College of Education provides the following training:[6]

I. Courses for (1) Interim Ordinary High School Assistants' and High School Specialists' certificates with Interim First-Class Public School certificates or Elementary certificates in Physical Culture and Art, (2) Ordinary certificates as teachers of Household Science.

II. Courses for the B.Paed. degree.

III. Courses under the School of Graduate Studies for the degrees of D.Paed., M.A., and Ph.D.

It is with the High School Assistants' and High School Specialists' certificates together with the additional certificates required to be gained concurrently that the discussion is concerned.[7]

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[5] Letter of Dean W. Packenham dated April 9, 1924, in reply to a request for information by the writer.

[6] Calendar of the University of Toronto, 1925-26, p. 570.

[7] The details will be found in the Calendar of the University of Toronto, pp. 571 ff.

The High School Assistants' certificate requires:

1. A university degree for admission.
2. Professional training consisting of:
   (*a*) Courses in theory.
   (*b*) Observation and practice teaching.
3. Courses for an additional certificate, either for the First-Class Public School certificate or for the Elementary certificate in Physical Culture or for the Elementary certificate in Art.

The High School Specialists' certificate requires all that is required for the High School Assistants' certificate and in addition:

1. The university degree must be a degree with honors.

2. The student must attend a seminar in the department of his specialty along with which he does special observation and practice teaching.

The professional training common to both certificates with the distribution of lecture periods allotted to each part of it is as follows:

A. Courses in Theory		
1. The Science of Education		100 lectures, *and*
2. School Management and Law		50 lectures, *and*
3. (*a*) Methods of teaching English		90 lectures
(*b*) Methods of teaching History		20 lectures
(*c*) Methods of teaching Geography		15 lectures, *and*
4. (*a*) Methods of teaching Latin		50 lectures
(*b*) Methods of teaching French or German or Spanish or Greek		40 lectures, *or*
5. (*a*) Methods of teaching Mathematics		80 lectures
(*b*) Methods of teaching Science		40 lectures, *and*
B. Observation and Practice Teaching		
(*a*) Observation	at least	60 lessons
(*b*) Practice	at least	40 lessons

This basic professional training involves, therefore, 150 lectures in courses of a general nature, 215 to 245 lectures in the methodology of the subjects of the high school curriculum, and 100 periods of observation and practice.

In some detail the course in the science of education includes such major fields as: educational psychology, principles of education, general method, educational classics, etc. The course in school management and law includes school management, school organization, and school administration embracing such topics as: forms of educational control, types of schools, school sites and surroundings, the teacher, the pupil, the organization of a school, the management of a recitation, discipline, time-tables, records and reports, tests, school law and regulations. The nature of the courses in the methodology of the high school subjects may be illustrated by the outline given for the course in science.[8]

The following are the main topics of the course:

A. Scope and value of the natural sciences; meaning of science and scientific method; educational value of science; inductive and deductive methods of investigation.

Experimental work; how conducted, how recorded; manipulation of apparatus; glass-working; making of simple apparatus; classroom discussion, its purpose, method, and relation to the experimental work; the use of textbooks; notebooks, method of inspection, drawing; reference books, most suitable books in each subject for the library; supplementary reading; methods in biology, physics, and chemistry of the Lower School, illustrated in lessons upon subject difficult of presentation.

B. Laboratory equipment for the teaching of elementary science, and of physics, chemistry, and biology; methods of demonstration; use of technical terms; theories, facts, scientific laws; textbooks and reference books.

Chemistry: Order of treatment; introductory work. Methods of conducting instruction in chemistry will be discussed, and illustrated in lessons upon subjects selected from such topics as the following: chemical laws and theories; valency; formulæ and equations; nomenclature; qualitative and quantitative experiments; chemical arithmetic; the elements, with sodium and chlorine as types.

Physics: Methods of conducting instruction in the more difficult parts of the courses in heat, light, sound, magnetism, electricity, and mechanics will be discussed and illustrated in lessons upon subjects selected from such topics as the following: specific gravity, properties of liquids and gases, machines, temperature, specific heat, laws of reflection, images in mirrors and lenses, laws of vibrating strings with problems, interference of sounds, lines of magnetic force, relation between statical and current electricity, practical applications of electricity.

Biology: Dissection; experiments with plants; the microscope; aquaria and terraria; school museums; plant and animal ecology. Methods of conducting instruction in biology will be discussed and illustrated in lessons upon subjects selected from such topics as the following: relation of structure to function, animal and plant types as the grasshopper, frog, hepatica, fern. This discussion will assume a practical acquaintance on the part of the student with the common plants and animals of Ontario.

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[8] Calendar of the University of Toronto, 1925-26, p. 597.

The announcements of the other methodology courses are similar in character to the one just quoted. It is clear that the major purpose of these courses is to make the student familiar in considerable detail with ways of teaching a very definite body of subject matter. The curriculum is prescribed by the central authority, and the task of the prospective teacher is to learn how to present to his classes the topics laid out for him.

In his observation and practice lessons the student, after being introduced to the general method of the recitation in the course on the Science of Education, observes about ten lessons and teaches about ten. Thereafter his observation and practice are guided mainly by the instructors in the special subjects. These instructors are expected to teach model lessons as they develop the various topics of their subjects. The observation and practice are carried out mainly in the University of Toronto Schools, a private institution which follows the Ontario high school course of studies, and in some of the Toronto high schools as well.

In addition to this basic training there is required for the Specialists' certificate a seminar meeting twice a week in the teaching of the subject or combination of subjects in which the student holds Specialist standing. Further observation and practice are required in connection with the seminar. The announcement of the seminar in classics is quoted for illustration:[9]

> In the seminar in Classics, topics are chosen germane to the teaching of Horace, Vergil, Cicero, Cæsar, Xenophon, and continuous Latin prose composition. The following list will show the nature of the topics for discussion:
>
> The teaching of Horatian metres; the poetic art of Horace; the translating of Horace into English prose; the use of metrical versions; certain Asclepiadean odes; the national odes; Horace's treatment of religion, death, friendship, and fortune; the selection of ''fine lines''; the complete teaching of an ode of Horace; the appropriate commentary.
>
> The teaching of Vergil in an honour class; the difficulties in translating Cicero; what T. Rice Holmes has done for the teaching of Cæsar; the sequence of tenses in Cæsar's indirect discourse; the teaching of Latin prose composition; the teaching of Xenophon in an honour class; the classical library.
>
> The direct method in Latin and Greek.

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[9] Calendar of the University of Toronto, 1925-26, p. 600.

The chief purpose of the seminar is, generally speaking, to prepare the student to teach the more advanced portion of the various high school subjects and also to give him an opportunity to study more intensively topics throughout a subject which are regarded as being difficult to teach. As with the special methods courses for the Assistants' certificate, the topics to be covered are largely taken for granted. There are in some of the seminar announcements indications that the values and organization of the subject are discussed. On the whole, however, the seminar does not appear to be designed to develop in the student a critical attitude toward the existing arrangement of materials.

The candidate for the High School Assistants' or High School Specialists' certificate is required to supplement the training already described by qualifying himself for the First-Class Public School certificate or the Elementary certificate in Physical Culture or the Elementary certificate in Art. If the student chooses the first of these he will receive additional instruction in methods of teaching the principal elementary school subjects and will also be required to do additional observation and practice. If he chooses either the second or third options he will attend a maximum of 120 lecture periods. The examinations for the certificates in Physical Culture and Art include practical tests in calisthenics or in drawing, modeling, designing, and the like, as well as the usual written examination. The detailed announcement of the courses for the certificate in Art includes a section devoted to methods of teaching. The courses for the certificate in Physical Culture contain no such section, except that the practice work in calisthenics may be regarded as preparing the student to govern a group of pupils on the gymnasium floor.

British Columbia.—The training of university graduates for high school teaching was transferred from the normal schools to the University of British Columbia in 1923. The relations between the University and Department of Education in respect to this training are described as follows:[10]

> The Department of Education has an understanding with the University according to which the latter undertakes to give professional training to graduate students qualifying for high school teachers. In return the University

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[10] Province of British Columbia, Survey of the School System, pp. 231 and 232.

> receives an annual grant from the Provincial Treasury. This grant, supplemented by the fees received from student teachers, enables the University to bear the expenses connected with the work of instruction. The teacher-training course at present, instead of being organized as a separate faculty, is under the Dean of Arts. . . .
>
> The University does not license teachers. It merely trains them and reports results to the Department of Education, which in turn issues licenses to those students whose standards of work have satisfied reasonable requirements. In theory, the Department of Education has little, if any, control over the staff or the courses in Education given in the University; in practice, its control is ample since the annual grant to the University is subject to a vote of the Legislature.

It will be observed that the Department of Education of British Columbia has not felt it necessary or advisable to have a statute enacted such as that under which the Ontario College of Education operates. The British Columbia Department issues licenses and the legislature provides funds. The University is given the task of appointing the instructors and setting up the requisite courses. Such a relation appears to offer fewer grounds for friction and to show greater confidence in the wisdom of the University than is found in the clauses of the Department of Education Act of Ontario which have already been summarized.

The course of study which leads to the Academic Certificate issued by the Department of Education of British Columbia is as follows:[11]

> (*a*) First Term—Concurrent with the first term of the University year (September 18 to December 17, 1925).
>
> During this term the Methods Courses in elementary school subjects will be given under the supervision of the University. Observation assignments and practice teaching in the elementary schools are required.
>
> Texts and references will be announced at the beginning of the term.
>
> (*b*) Second Term—Concurrent with the second term of the University year (January 4 to April 23, 1926).
>
> The Methods Courses given during this term by members of the University staff are confined to the high school subjects. Candidates will be permitted to register for professional instruction (including observation assignments and practice teaching in the high school) only on those subjects which they are qualified to teach by reason of their

[11] Department of Education, Programme of Studies for the High, Technical, and Normal Schools of British Columbia, 1925-26, p. 75.

previous academic preparation. Methods Courses in three subjects are obligatory.

Texts and references will be announced at the beginning of the term.

(*c*) Obligatory Subjects—Required of all candidates for the Academic Certificate.
  (1) Educational Psychology—Two hours a week. Both terms.
  (2) History and Principles of Education—Two hours a week. Both terms.
  (3) School Administration and Law—One hour a week. Both terms.

Texts and references in the above courses will be announced at the beginning of the first term.

(*d*) Observation Assignments and Practice Teaching—Approximately 100 hours: 40 hours in the elementary school and 60 hours in the high school.

This course of training is similar to that given for the High School Assistants' certificate in Ontario with the principal difference that in British Columbia courses in methods of teaching the elementary school subjects are obligatory instead of optional. The same emphasis is observable as was found in Ontario upon observation and practice teaching and upon special methods of teaching the various subjects rather than upon general method.

The Undergraduate Plan

At McGill University and in the Universities of Nova Scotia the training of university students is given concurrently with their undergraduate studies.

McGill University.—The professional training for the First-Class High School Diploma is given concurrently with the third and the fourth years of the undergraduate course. The courses required are outlined as follows in the calendar of McGill University.[12]

1. Principles of Education; Psychology of Education; History of Education. Third Year. 3 hrs., 1st term: Mon., Wed., Fri., at 5. This course is a prerequisite for Course 2 and for the Course in Practical Teaching.

2. (1) Methods of Teaching. Fourth Year.
  A. Principles of general method.
  B. Special methods in elementary subjects.
  C. Special methods in High School subjects.

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[12] Calendar of McGill University, 1926-27, p. 160.

(2) School and Class Management. Fourth Year.
  A. School administration, and school law and regulations of the Province of Quebec.
  B. Class management and discipline.
  3 hrs., 2nd term: Mon., Wed., Fri., at 5.

Courses 1 and 2 are required for the High School Diploma of the Province of Quebec, together with (*a*) fifty half-days of practice teaching and criticism lessons under expert supervision; and (*b*) special courses in methods of teaching French, music, and drawing.

These courses count towards the Bachelor's degree for students in the pass course, but are always extra for students who are proceeding to a degree with honors.[13] It will be observed that the amount of theory required is not large, amounting in all to a three-hour course for a year. In comparison with this limited amount of theory, the requirement for practice teaching, 50 half-days, is very large indeed. This practice teaching is carried on in several of the Montreal high schools under the supervision of the Professor of Education at McGill. It is done not during the college year but before the University opens in the autumn and after it closes in the spring.[14] Students who hold an intermediate diploma or have had successful teaching experience may be exempted from the practice teaching requirement.[15] The plan of making professional training for high school teachers undergraduate and concurrent with academic training was adopted, apparently, without any conscious policy being involved.[16] Nevertheless there is an important difference between introducing a student to the theory and practice of teaching while he is taking the subject which he will later teach and giving him his professional training after his academic studies have been completed.

Universities of Nova Scotia.—During the year 1926-27 the professional training of university graduates formerly carried on by the Nova Scotia Normal College was removed to the universities and incorporated in the undergraduate course. The announcement of this important change issued by the Provincial Department of Education [17] is quoted in part below:

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[13] Information supplied by Sinclair Laird, Professor of Education.

[14] Calendar of McGill University, 1926-27, p. 161.

[15] *Ibid.*, p. 161.

[16] Information supplied by Professor Laird.

DETAILS OF THE PLAN

1. An outstanding feature of the plan about to be put into operation lies in the opportunity which it presents to the student of obtaining a degree *and* a recommendation for a teacher's license within a period of study which does not exceed that required for a degree alone. Students, accordingly, who desire to take advantage of this offer will be furnished on making application to the Registrars of their respective Universities, with the details of a four-year course of study leading to the degree of B.A. or B.Sc. (as the case may be) together with a recommendation for a teacher's license. The course prescribed will conform as closely as possible to those at present required for the degree alone, subject always to the inclusion of the following classes which will be compulsory for all students seeking a teacher's license.

(1) Educational Psychology. Two or three hours a week.*
(2) History of Education. Two hours a week.
(3) Theory and Practice of Teaching. Two hours a week. (In addition to the regular work at the University this class will include a number of visits to the local schools for purposes of directed observation and practice teaching.)

} To be given by the University Departments of Education.

(4) Any *two* of the following three classes in the social sciences:
   (*a*) Government of the British Commonwealth. This class will be given three times a week by the Department of Political Science and will include a study of the political history of Canada and a review of the School Law of Nova Scotia.
   (*b*) A class in Sociology with special reference to conditions in Nova Scotia. The class will be given twice a week by the Department of Sociology.
   (*c*) A class in Economics with special reference to conditions in Nova Scotia. Two hours a week, by the Department of Economics.

It should be noted that students who do not take the class on the Government of the British Commonwealth will be required to write a separate examination on the Nova Scotia School Law, acquaintance with this subject being necessary for a teacher's license.

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* The decision as to whether this class will be given two or three hours a week remains at the discretion of the universities. Where a previous course in psychology is regarded as prerequisite, the class will be given probably only twice a week. If enrollment in the class carries with it exemption from any previous course in psychology otherwise required for a degree, the class will be given three times a week.

[17] Announcement of Teacher-Training Courses at the Universities of Acadia, Dalhousie-Kings, and St. Francis Xavier.

2. The class specified above on Theory and Practice of Teaching must be taken by all candidates for a teacher's license in the final year of their university course, those on Educational Psychology and History of Education being prerequisite. Students are also recommended to complete the class on Educational Psychology before enrolling for that on the History of Education.

3. In the opinion of the Provincial Education Department, a condition prerequisite to the granting of all teachers' licenses of whatever class, should be, and for college graduates must be, the ability to use, and teach the use of, the English language in a clear, direct and practical manner. While, therefore, no specific number of classes in English Language and Literature will be required by the Education Office from university graduates seeking a license, such licenses will be granted only to candidates who in the opinion of the university authorities have given proof of an adequate degree of proficiency in the oral and written use of the mother tongue.

4. With a view to being able to give the physical exercises required in the schools of Nova Scotia, teachers-in-training will be required under the present plan to take an elementary course in Physical Training at their respective universities. Certificates for these courses, arrangements for which are being made by the universities concerned, will be regarded by the Education Office as one of the conditions for the award of licenses.

5. The standard of license granted by the Education Office will be determined in accordance with recommendations made by the university authorities. These recommendations will be based upon the student's general record during his attendance at the university and more especially upon the character of his work in the teacher-training subjects. While the three Universities may, if they see fit, issue certificates or diplomas of teaching proficiency to their students, such diplomas will not in themselves constitute a license to teach in the schools of Nova Scotia. Their chief value, other than that of a record of personal scholarship, will lie in the recognition accorded to them by the Education Office as entitling the holder to receive a teacher's license. The standard of license granted will in all cases be determined by the Superintendent of Education.

6. To meet the difficulties of a transitional period it has been decided to allow those who will be taking the final year of their degree courses in 1926-27 to qualify for a teacher's license by taking the class on Theory and Practice of Teaching only, all other requirements, except Physical Training and competency in the use of the English language, being dispensed with. Other students who have reached a less advanced stage in the ordinary B.A. or B.Sc. courses will be required to complete the full teacher-training requirements if they desire to obtain a teacher's license.

In issuing the present leaflet, the aim of the Education Office has been to bring before the students of Nova Scotia, in as concise a manner as possible, the nature of the new educational programme which is about to be put into operation in the universities of the province. It will be apparent that the present scheme not only allots a new field of activity to the universities in the training of teachers but also provides for an approximate uniformity in the teacher-training methods to be adopted by the three Universities. This result has been made possible only by the spirit of coöperation and devotion to a common educational end which has been shown by the authorities of the Nova Scotian Universities in enabling the new policy of the Education Office to be put into effect. It is the earnest hope of the Education Office that the students of the three Universities will also see in the plan announced in this pamphlet, an opportunity to create a new spirit, in the Nova Scotian schools.

Two features of the requirements outlined are worthy of note. In the first place, the practice teaching requirement is very indefinite—"a number of visits to the local schools for purposes of directed observation and practice teaching" is clearly inadequate if any thoroughgoing preparation for teaching is contemplated. In the two Universities which follow the undergraduate plan the difficulty of providing for adequate apprenticeship in the art of teaching is apparent. In the second place, the requirement of two courses in the social sciences is a departure from any of the curricula hitherto considered. Undoubtedly the social sciences may be made to contribute much illumination to the place of organized education in social life. The question arises whether the requirement of a knowledge of pertinent elements of biological science is not equally important.

Relations of Universities and Provincial Departments of Education

In those provinces where the training of high school teachers is still carried on by the normal schools the problem of control is likely to arise whenever the question of transferring this training to the universities is definitely faced. There is already in the statutes of the Province of Alberta a provision giving the Minister of Education power to establish and control a teachers' college and to affiliate it with the University of Alberta. This institution has not as yet been established.[18] Obviously here is a provision which looks to the establishment of a school controlled by the Department of Education just as the public school system and the normal schools are now controlled. The policy of government control of teacher training adopted by Ontario is thus to be extended.

It is open to question whether the model of Ontario should be followed. Undoubtedly the statute which governs the Ontario College of Education if administered by aggressive department officials might readily produce a situation which the University would find intolerable if the College of Education were to remain "the University's professional school." It is a tribute to the good sense of the present Ontario educational authorities both of the Department and of the University that the plan appears to work. It is also certain that the function of statutes or regulations is not to provide the basis for possible conflict but is to set up the outline of a scheme under which the possibilities of friction will be reduced to a minimum.

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[18] See, however, note 1, p. 131.

Government control of teacher training has been justified in Ontario by the statement that "a sufficient supply of trained teachers is so vital a factor in the success of the school system that the government has assumed full responsibility for the standard of training."[19] The first part of this statement is undoubtedly true. It does not, however, follow that teacher-training institutions must be under the direct control of the government. It may be argued that it is better for the government to keep its hands off, provided well-trained teachers can be secured without its direct intervention. There is little doubt that a second reason for governmental control is as strong as the one just given. Centralized control of the schools has been shown to be a prominent feature of the Ontario system. If teachers are to uphold this uniformity they must be trained in and for the system. If the training of teachers should escape from the direct control of a provincial department of education there might be good reason to question the orthodoxy of these teachers. The full statement of certain courses in the Ontario College of Education has already shown that there is a tendency, in the preparation of teachers, to lay emphasis upon the teaching of the high school syllabus as it stands at the expense of the critical evaluation of the materials of instruction.

The question finally comes, of course, to the degree of control which the government is to exert. The right of the government charged with the responsibility of maintaining an efficient system of public schools should certainly extend to guaranteeing that teachers receive adequate preliminary training. Such a guarantee should be adequately met by the power of certification on the basis of definite standards of preparation and through financial appropriation to the institutions which do the training. When, however, the government through its officials concerns itself with the content of courses taught in the training college and with the appointment of instructors, then it may, in the long run, defeat its own purposes. The initiative of teachers and those who train them is too important to be sacrificed to the demands of a system, however perfect that system may appear to its administrators.

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[19] See the extended quotation dealing with technical teachers which is given later in this chapter.

Should the Professional Training of High School Teachers Be Undergraduate or Postgraduate?

From the survey of both plans of training already made in this chapter the plan of postgraduate training may be seen to offer the following advantages: (1) The total period of preparation is longer, and (2) the postgraduate year may more readily be organized with exclusive regard for professional ends.

The possibility of securing the first advantage depends in part on economic considerations. There is a relation between the length of training required and the salary which the professional worker is to receive. It depends also on the stability of the profession. A long period of preliminary training cannot well be demanded of men and women who do not expect to remain in the teaching profession for a considerable period. In the case of the Western provinces the normal school training received by prospective high school teachers is already postgraduate. Economic and professional conditions appear to be such that the longer period of training can be required. There would need to be cogent reasons advanced on the other side if the period were to be reduced in transferring the training to the universities.

The second advantage clearly lies with the postgraduate plan if Canadian conditions are taken as evidence. It has already been noted that Ontario and British Columbia both require 100 periods of observation and practice. At McGill and in Nova Scotia where the undergraduate plan is followed practice teaching in the first case is done before and after the college session, and in the second is, so far as the requirements go, merely nominal. It is evident that a considerable amount of apprentice teaching can be more easily arranged in a postgraduate year. Again, a full year devoted to professional preparation is more than either of the undergraduate plans can show. Further, it may be argued that the integrity of the professional training may more readily be maintained when it is organized as a postgraduate year and not merely as an adjunct to an arts degree.

On the other hand, it may well be urged that it is inadvisable to divide the teacher's preparation into two distinct portions, four or five years devoted exclusively to academic training followed by a year devoted exclusively to professional training. During his undergraduate years the student naturally is engrossed with his subject and may readily become convinced by the time he graduates that the subject is all-important. He has never been invited to consider that the wealth of learning he possesses will be of value only in so far as he can use it to make the world of men and events more significant to young people in high school. In other words, he may not acquire the point of view of the teacher. Indeed, he may move further and further away from it until he supposes that pupils must somehow be made to fit into the subject rather than the other way about. His professional training in his graduate year may easily seem to him to be a time when he learns devices for imposing upon his pupils a certain quantum of subject matter. That the curricula for the training of teachers should be integrated from the beginning of their college work with a view to professional ends has been laid down as a fundamental principle by the authors of the Bulletin of the Carnegie Foundation for the Advancement of Teaching on *The Professional Preparation of Teachers for American Public Schools.* The first recommendation which they make to guide the organization of collegiate curricula for the professional preparation of teachers is this:[20]

> Curricula of collegiate grade that have for their purpose the preparation of teachers should be professionalized throughout in the sense that every course should be chosen with specific reference to the contribution that it makes to the teacher's equipment. This would, by definition, include courses of a distinctly ''liberal'' type.

Considering the merits of both plans, the conclusion seems warranted that curricula for the preparation of high school teachers, both those already organized and those which may be set up in the future, should seek to secure the advantages which both have to offer. This would mean that the prospective high school teacher would follow an undergraduate curriculum organized so as to give him: (1) the best possible arrangement of studies in the subject he is to teach; (2) an acquaintance with certain fields, for example, biology, psychology, and sociology, which provide a background for the theory of education and teaching; (3) an introduction to the theory of his profession. The postgraduate year could then be given over to intensive professional preparation centering in extended periods of observation and practice.

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[20] The Carnegie Foundation for the Advancement of Teaching, The Professional Preparation of Teachers for American Public Schools, Bulletin No. 14, p. 392, 1920.

TRAINING OF TEACHERS FOR SECONDARY VOCATIONAL SCHOOLS

The activities of the various provinces with respect to the training of secondary vocational teachers correspond rather closely with the progress made in establishing secondary vocational courses. There is, in fact, considerable variation between provinces in the degree to which secondary education is being differentiated (see Chapter XI) so as to include vocational work. An inspection of the progress of training teachers throughout the Dominion would therefore show an ascending scale of activity from little or nothing up to active preparation for giving systematic training to vocational teachers. The plans for such systematic training have recently been formulated in Ontario and put into operation at the Training College for Technical Teachers established in 1925.[21] Elsewhere the efforts of provincial authorities, where there are any,[22] have been concerned with securing some professional training for their vocational teachers either by assisting them to go outside of the province for it, or by whatever temporary ways can be made available at home.

The plan for training technical teachers in Ontario is thus of considerable interest. The following extended quotation describing it gives not only a statement of the organization of the Ontario College for Technical Teachers, but also a statement of the general principles of teacher training which have been adopted in Ontario.

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[21] It should be noted that provision for the training of teachers in agriculture, commerce, and home economics has been made in the Ontario College of Education.

[22] In 1926 five provinces earned grants for teacher training under The Technical Education Act. Seventh Report of the Technical Education Branch of the Department of Labour, Canada, p. 13.

These principles summarize very definitely the policy of teacher training in the Ontario College of Education which has been dealt with at length in the first part of this chapter. In the training of technical teachers the same principles—government control, the separation of training in how to teach from training in the matter to be taught, and a maximum of practice teaching—have been applied. In addition, it is important to observe that in the case of technical teachers Ontario plans to secure its candidates from among skilled craftsmen rather than from among college trained men. This decision indicates an intent on the part of Ontario that the graduates of its vocational schools shall not fail to become competent workmen.

The following statement of the plans of the Ontario Training College for Technical Teachers was prepared by the Principal, Mr. F. P. Gavin, and is quoted from the Seventh Report of Technical Education Branch of the Department of Labour:[23]

> The Ontario Training College for Technical Teachers began its first term in Hamilton on April 20, 1925. The purpose of this institution is to train teachers of shop or vocational subjects for technical schools, and manual training teachers for public and high schools.
>
> The establishment of this training college marks the carrying out of the last of the important recommendations made by Dr. Seath in 1911, in his valuable report on "Education for Industrial Purposes."
>
> The following figures give evidence of the growth of the vocational schools. In the year 1924-25 the number of full-time day schools was twenty-seven, with an enrollment of 11,595 full-time day pupils, and 3,614 part-time or special pupils. Evening vocational classes were carried on in fifty-two (52) places, with an enrollment of 35,675.
>
> The number of teachers employed in the day schools was 524, and in the evening schools, 1,182. A large proportion of these teachers, possibly one-half, are teachers of practical or shop subjects, such as machine shop practice, drafting, dressmaking, motor mechanics. Thus there has appeared in the teaching body an entirely new type of teacher, for the training of which no provision had been made.
>
> The introduction into the teaching body of teachers of practical subjects has raised two problems, viz., how to obtain them, and how to train them.
>
> One method of obtaining shop teachers is that used to obtain academic teachers, viz., to train young people, looking forward to shop teaching, in the content of the trade or shop subject, in suitable institutions of a secondary

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[23] Seventh Report of the Technical Education Branch of the Department of Labour, Canada, pp. 31-35.

school or college grade. For example, a young student, ambitious to be a machine shop teacher, would take a four or five years' course in a suitable school, in the operations, processes, and fundamental principles of the machinist trade, and in related subjects such as English, mathematics, science, and drafting. He would then take a course in the principles of education and methods of teaching in some suitable teacher-training institution. This method is much used in many parts of the United States.

Another method is to recruit such teachers from the trade and industry where they have obtained, under actual trade conditions, training in the content of the trade concerned.

Teachers obtained under the first method have a good all-round general education, a fairly good acquaintance with the operations and processes of the trade, a good knowledge of related fields and their bearing on the fundamental principles of the trade, and probably bring to their teaching a desirable professional attitude. On the other hand, they are not skilled and experienced craftsmen, looked up to and respected by the working members of the craft.

Teachers obtained under the second method are acquainted with the actual working conditions of the producing shop, know the standards of skill and speed required in the trade, and, if properly selected, are masters of their trades or crafts and are esteemed as such by their fellows.

Ontario has decided on the latter method of obtaining technical teachers.

It is evident that teachers recruited from industry need, in addition to their trade training, knowledge of, and skill in, the art of teaching. The belief that a man who knows his subject can therefore teach it to others is no longer held by anyone who knows anything of the learning process. In recent years, due to the rapid growth of technical schools, we have had many untrained persons in charge of shop instruction, and the difference in teaching skill between them and the regularly trained teachers would convince anyone of the value of teacher training.

In the development of teacher training work in Ontario the following general principles have been recognized and accepted:

(1) Training in the art of teaching is necessary, and every teacher in the state-supported schools should be trained in the principles of education and the methods of teaching.

(2) All teacher-training schools are Government institutions under the direct control of the Minister of Education. A sufficient supply of trained teachers is so vital a factor in the success of the school system that the Government has assumed full responsibility for the supply and for the standard of training.

(3) Academic and professional training should be separated. The teacher-in-training is expected to be familiar with the content of his subject before he goes to the teacher-training institution.

(4) Practice teaching under actual classroom conditions should form an important part of the training. "Learn to do by doing" applies to teaching as well as to music or golf.

These principles have been established through seventy-five years of progressive developments in the training of academic teachers. They have been accepted as fundamental in the organization of a scheme of teacher training for shop or vocational teachers. The decision to recruit teachers of shop or craft subjects from trade and industry is a recognition of the third principle.

In attempting to formulate a scheme of training for vocational teachers, based on the foregoing principles, the question of training these teachers along with the regular academic teachers must be considered. In dealing with this question certain factors must be taken into account:

(1) Persons recruited from the trades, unlike those in attendance at Normal Schools or College of Education, have been out of school for a number of years and, as a consequence, have lost to some extent the habit of study. On the other hand, they have a background of experience and maturity which perhaps offsets in value the study habits of the student teachers in the regular training schools.

(2) The facilities for practice teaching in the training schools for academic teachers are not suitable.

(3) The time factor is important. Skilled craftsmen are mature people, probably married and with dependent families, and already in good wage-earning positions. Either the time arrangements of the period of training must be as short and as conveniently arranged as possible, or the teachers-in-training must be subsidized to take the course.

Consideration of the factors of maturity, facilities for practice teaching, and the time factor make it desirable that shop teachers shall be trained in a school especially organized for the purpose.

The length of the course has been fixed at twenty weeks, ten of which are to be taken in either the autumn or the spring term, and ten of which are to be taken in two summer sessions of five weeks each. During the ten weeks' period observation and practice teaching form the chief part of the work. During the summer sessions, the work consists largely of theoretical work, trade analysis, and the preparation of courses of study.

This period of twenty weeks appears to be the minimum of time needed to give the required training. The distribution of time has been made such as it is to enable teachers already in service to take the course with the least possible absence from their schools during the school year.

The subjects of study included in the curriculum are:

English
Principles of Teaching
History, Principles, and Problems of Vocational Education
School and Class Management and School Law
Trade Analysis and Courses of Study
Study of Industries
Methods of Teaching Industrial Subjects
Practice Teaching

Vocational Guidance
Shop Plans and Equipment
Mechanical Drawing
Costume Design

Due to the limitations of time, the work taken up in the theoretical subjects is carefully selected to meet the needs of the student teachers concerned. Time does not permit of any extended study of general psychology, of the history of education in other countries, or of general principles of school administration. Observation work and practice teaching under actual classroom conditions are recognized as important elements of teacher training. The regular day classes of the Hamilton Technical Institute are used for this phase.

Each student is required to submit a stated number of reports on model lessons taught by critic teachers, and to prepare lesson plans for and teach a stated number of assigned lessons. Near the end of the term each student-teacher takes complete charge for two whole days of a given shop. He assembles and dismisses the classes that come to the shop, keeps the register and other records, gives out supplies, carries on the instruction of the classes, and in general takes the place of the regular teacher.

In Canada and in the United States vocational education is a development of the last twenty years. Public interest and support has been a matter of perhaps not more than ten years. Many of the problems connected with it are new, and as yet in the field of debate and discussion.

It is desirable that technical teachers should know what are these problems and become acquainted with at least a part of the considerable body of literature that has grown up around them. In order to do this, each student-teacher is given a topic dealing with some problem or phase of vocational education, and required to make the investigation necessary to make a report on the topic. The topics are so selected as to require, on the part of the students, considerable reading, study, and investigation, including in some cases inquiries among industries. When completed, the essay of about 3,000 words is read by the writer to the whole group and made a subject of discussion. The debates in many instances are most enlightening, inasmuch as they disclose unsuspected backgrounds of experience and knowledge, and powers of criticism and judgment, both on the part of the group to criticise, and of the writer to defend his thesis.

The enrollment at the Training College for the sessions of 1925 and the spring session of 1926 was as follows:

	Men	Women	Total
Summer Session, 1925..................	53	48	101
Autumn Session, 1925..................	10	5	15
Spring Session, 1926—			
Class A (10 weeks' previous attendance) .	5	3	8
Class B (5 weeks' previous attendance) ..	6	3	9
Class C (no previous attendance)	9	2	11
			144

The organization outlined in the foregoing paragraphs provides for the training of full-time day teachers. There remains, however, a large number of evening class teachers of technical subjects who need instruction in the methods of teaching. The majority of these are employed in their regular callings during the day time, and give an evening or two a week to evening class work. In many cases they are the only persons in the community sufficiently versed in their callings to give instruction, and often do so as a matter of public duty, and at the earnest solicitation of the principal. It is out of the question to expect persons teaching in evening classes only to give up time and money to take such a training course as may be required of full-time day teachers.

It is proposed, however, to give to such teachers some assistance in the work of teaching. The sessions of the Training College are so arranged that there is a ten weeks' term in the autumn and a ten weeks' term in the spring. This schedule is made for two reasons. First, as already stated, to make the period of training as short as possible and the time arrangements as convenient as may be for local school authorities. There is, however, another reason. During the months of January, February, and March, the members of the staff are available for field work. It will be part of their work to visit centres in which graduates of the Training College are at work in order to afford them further assistance in the selection, organization, and presentation of their subjects. At the same time, they will conduct for evening class teachers, short, intensive, itinerant courses of, say, one or two nights a week in conveniently located centres. Each subject of the course it made up of a small number of topics, each topic forming a unit of instruction in itself. The method of the course is by discussion and round-table conference rather than by lecture. Such topics as the following are taken with these evening class teachers: how to arrange the subject matter in a suitable learning order; how to teach a lesson; the different methods of presentation; how to keep records and make reports; how to determine the needs of the pupil and to adjust the course to meet those needs, etc. From this work it is hoped that there may result a better adaptation of the evening classes to the needs of the community, an improvement in the teaching methods, and consequently a greater efficiency in the evening class program.

SUMMARY

During the present decade increasing activity has appeared in the direction of better professional training for high school teachers. This activity applies not only to the university graduates who are to be teachers but also to those who are to teach vocational subjects. In Ontario where the systematic professional training of the academic high school teachers has reached its fullest development, the principles which govern the training are the following.

1. Professional training is essential.
2. Teacher-training institutions should be controlled by the government.
3. Teacher-training institutions for academic high school teaching should be affiliated with the university.
4. Academic and professional training should be separate, professional training being postgraduate.
5. Practice teaching should form an important feature of professional training.

These principles have not all been adopted elsewhere. The first is generally recognized. The second, regularly applied to the provincial normal schools, has not been generally accepted to the extent of direct control when the professional training of high school teachers is carried on in the universities. It was argued in the present chapter that the British Columbia plan of control through certification and appropriation was preferable to direct control involving supervision of courses and appointments. With respect to the third principle, the country is so far about equally divided. The position was taken that the provincial normal school was an unsatisfactory institution for the professional training of university graduates. Practice differs in regard to the fourth principle. In two of the universities and also where training is given in the provincial normal schools, academic and professional preparation are strictly separated into undergraduate and postgraduate periods. In two universities professional training is given concurrently with the student undergraduate course. The conclusion was reached that rigid separation is a mistake. The student's undergraduate course, it was urged, should be organized so as to give it a professional direction while the postgraduate period should be retained for intensive professional preparation. The fifth principle was regarded as of the greatest importance and it appeared that a postgraduate period greatly facilitates the introduction of systematic practice teaching.

The demand for vocational teachers is now beginning to be felt, but the organization to meet the demand is still too new to admit of secure characterization. The recently formulated plan in Ontario involves in general the same principles which have been applied to the training of academic teachers with these differences, that affiliation with the university has been omitted and the prospective technical teacher is sought not so much from college trained men and women as, preferably, from the ranks of skilled craftsmen. The apparent reason for the decision to secure vocational teachers mainly from industry is that pupils who have been taught by those who are recognized as masters of their various crafts will be accepted more readily by industry.

CHAPTER X

THE HIGH SCHOOL PRINCIPAL

INTRODUCTION

It has been argued more than once in the present study that an important line of development for the Canadian high school system lies in the direction of greater responsibility for local authorities. It becomes, therefore, a matter of importance to examine the character of the local leadership which the high schools now have. The high school principal has thus been selected for study as one who occupies a strategic position in the local administration of schools. The present chapter will present facts relative to the sex, age, salary, experience, stability, and training of a group of 140 principals. With respect to several of these items, facts concerning a similar group of American high school principals are available, which will serve to exhibit the status of the Canadian principal in greater relief. A limited amount of data will also be presented bearing on the way in which the principal's working time is occupied; a section will be devoted to the principal's professional attitude, and the chapter will close with such suggestions as appear warranted for increasing the effectiveness of local high school administration.

SOURCES OF THE DATA

The facts which are to be presented are derived from replies to Section A of the Questionnaire to Canadian High School Principals which is printed in full in Appendix C. For the sake of clarity a distribution of the 140 schools from which these replies were received is here repeated in Table 26.

In presenting the facts concerning high school principals, with reference to age, salary, training, and other items, the grouping of schools given in Table 26 will be adhered to. The manner in which these replies were distributed over the several provinces may be seen in Appendix C. In the present chapter no attempt will be made to make comparison between provinces, but it may be well

TABLE 26

DISTRIBUTION OF 140 SCHOOLS REPLYING TO QUESTIONNAIRE TO HIGH SCHOOL PRINCIPALS, GROUPED ACCORDING TO NUMBER OF TEACHERS ON STAFF, WITH THE MEDIAN ENROLLMENT FOR EACH GROUP

Group	No. of Teachers	No. of Schools	Median Enrollment
I	5 or fewer	69	104
II	6–10	37	220
III	11–20	21	454
IV	21 or more	13	896

for the reader to remember that more than half of the total number of replies to the questionnaire came from the province of Ontario. Thus the facts are strongly influenced by conditions in Ontario, but not much more than the importance of the Ontario high school system warrants.

SEX

Under the heading of the sex of those who hold high school principalships, very little need be said. Only 9 or 6.4 per cent of the 140 principals of this study were found to be women. Eight of these were in the smallest schools of Group I. One was in Group II. This percentage of women principals is too small to warrant comparisons between men and women principals in the various items pertaining to the principalship which occupy the remainder of this chapter. The high school principalship in Canada may be regarded with few exceptions as a man's position.

AGE

The age of the incumbent of any office of itself means very little. When maturity of years is accompanied by long experience, age figures have greater significance. When length of years means ripe experience and protracted training, age becomes highly important. The extent to which training and experience are possessed by the principal will appear from the discussion which follows. For the present it may be observed from the accompanying table that the principal is usually a mature man. Seventy-five per cent of all principals have passed their thirty-fifth year; 50 per cent are more than forty-three years old; and 25 per cent are fifty-five years old or more. Even in the smallest schools almost 50 per cent are forty years of age or more and 25 per cent are over fifty. This last fact seems to indicate that not a few men feel that the principalship of a small high school offers them a satisfactory lifetime position. It may be further observed that the principals of the larger schools are usually older men, a regular increase in age being apparent in advancing from Group I to Group IV, until in the largest schools with 21 teachers or more 50 per cent of the principals are fifty-four years of age or more and only 25 per cent are younger than forty-nine.

TABLE 27

AGE OF 130 * HIGH SCHOOL PRINCIPALS AT THE FIRST QUARTILE, MEDIAN, AND THIRD QUARTILE FOR EACH GROUP AND FOR ALL GROUPS COMBINED

Group	First Quartile	Median	Third Quartile
I	33.3	39.5	50.25
II	35.0	41.0	52.3
III	38.5	46.3	52.0
IV	49.5	54.0	61.5
All	35.1	43.25	55.8

* Ten principals of the 140 failed to reply to this question.

SALARY

The high school principal, in common with other workers in the field of public education, is essentially a public servant, and his salary is one measure of the value which the public sets upon his labors. Persons of independent means, enthusiastic altruists, or the occasional genius may work for compensation which is far below the value of their efforts, but no considerable body of competent men is likely to undertake long periods of preparatory training in order to enter positions which do not afford a reasonable livelihood. It is one element in a true profession that its practice brings reasonable financial returns for extended preparation and experience. In this sense the salary of the high school principal is one indication of the degree to which the position is becoming professionalized.

The following facts may be selected from the data of Table 28 for special emphasis. The lowest salary recorded is $1,745, the highest, $5,000. Of all principals, 75 per cent receive a salary of $2,433 or more; 50 per cent receive $2,760 or more; 25 per cent receive $3,319 or more; 25 per cent receive less than $2,433. Seventy-five per cent of the principals in the smaller schools receive $2,175 or more. None of the principals in the two larger groups receives less than $3,000.

TABLE 28

DISTRIBUTION OF SALARIES OF 129 * HIGH SCHOOL PRINCIPALS, SHOWING THE LOWEST, THE FIRST QUARTILE, THE MEDIAN, THE THIRD QUARTILE, AND THE HIGHEST SALARY RECEIVED FOR EACH GROUP

Group	Lowest	First Quartile	Median	Third Quartile	Highest
I	$1,745	$2,175	$2,516	$2,927	$3,100
II	1,775	2,662	3,012	3,244	4,074
III	3,000	3,375	3,600	3,844	4,375
IV	3,000	4,094	4,375	5,000	5,000
All	1,745	2,433	2,760	3,319	5,000

* One principal failed to reply. Ten principals of the Protestant schools of Quebec are omitted because these schools combine elementary grades and high school grades. Although as pure high schools they rank very small, the principals were in receipt of a salary usually paid to the principal of quite a large school.

The median salaries for each group show a steady advance from the smaller to the larger schools, namely, from $2,516 in Group I to $3,012 in Group II, to $3,600 in Group III, and $4,375 in Group IV. The advance from group to group stands at between $500 and $700. A similar advance from the smaller to the larger schools is found in each of the measures used. The possibility of a considerable increase of salary within the principalship as larger responsibilities are assumed is an important element in making the position attractive to competent men who are adequately prepared.

In general, the principal's salary in Canada seems to offer a very modest living to the great majority of principals, a fair degree of comfort to at least half, and a satisfactory livelihood to the upper quarter. As in every calling, there are some at the lower end of the scale who will find it very hard to make ends meet.

These salaries, with one important exception, appear in a more favorable light when compared with those of a representative group of high school principals in the United States. Koos in his book, *The High School Principal*, presents a distribution of salaries for

421 high school principals representing both large and small communities. Since frequent reference will be made to his study, a comparative table is here inserted showing the basis of grouping the schools and the median enrollment and the number of schools in each of the groups reported in his study and in the present one. The number of schools used in this study is much smaller than the number used by Koos, but, considering the size of the two countries, it is quite as representative. This study also involves fewer large schools—a point which again illustrates a difference between the two countries. The median enrollments for each group of this study are smaller than the corresponding medians of Koos' study, a fact which does not invalidate but rather emphasizes the salary comparisons about to be made.

TABLE 29

COMPARISON BETWEEN KOOS' STUDY * AND THE PRESENT STUDY WITH RESPECT TO BASIS OF GROUPING SCHOOLS, MEDIAN SCHOOL IN EACH GROUP, AND NUMBER OF SCHOOLS IN EACH GROUP

Group	Basis of Grouping		Median Enrollment		No. of Schools	
	Koos' Study	Present Study				
	Population Range of Communities	No. of Teachers on the Staff	Koos' Study	Present Study	Koos' Study	Present Study
I	1,000–2,500	5 or fewer	161	104	104	69
II	2,500–10,000	6–10	279	220	101	37
III	10,000–25,000	11–20	579	454	150	21
IV	25,000–100,000	21 or more	1158	896	66	13
All	......	......	404	169	421	140

* The data for the relevant parts of this table have been compiled from Koos, Leonard V., *The High School Principal*, pp. 3 and 5.

The method adopted by Koos of grouping his schools according to the size of the community produces, as might be expected, a large amount of overlapping, small schools being found in the larger communities and large schools in the smaller ones.[1] The method of the present study by which schools are grouped according to the size of the staff produces very little overlapping. The result of this situation is that the difference between the lowest and the highest salaries paid to Canadian and American principals is not so depend-able a measure of comparison as the difference between the median salaries paid to each group. A reference to Table 30 will show that the median Canadian school in each group is smaller than the median school of the corresponding American group. In every group, however, the median salary of the Canadian principal exceeds the median salary paid to his American colleague by a considerable amount. The amounts are: for Group I $341, for Group II $612, for Group III $600, and for Group IV $775. The median Canadian salary for all groups is a little ($40) less than the median American salary. Considering the fact that Koos' study includes proportionately a very much larger number of large schools than does the present study, the comparison between the medians of all salaries has very little importance. The significant basis of comparison is between the medians of the groups. It is clear, then, that on the whole the Canadian principal is better paid than the American principal who administers a school of similar size.

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[1] Koos, *op. cit.*, p. 5.

TABLE 30

Comparison of the Lowest, the Median, and the Highest Salaries Paid to American[*] and Canadian High School Principals, for Each Group

Group	Lowest Salary		Median Salary		Highest Salary	
	U. S.	Canada	U. S.	Canada	U. S.	Canada
I	$1,400	$1,745	$2,175	$2,516	$4,600	$3,100
II	1,500	1,775	2,400	3,012	5,200	4,074
III	1,600	3,000	3,000	3,600	6,000	4,375
IV	2,400	3,000	3,600	4,375	6,000	5,000
All	1,400	1,745	2,800	2,760	6,000	5,000

[*] Koos, *op. cit.*, p. 13. The figures for men only have been selected from Koos' table. Such a small proportion of Canadian principals is made up of women that this method forms the fairest basis of comparison without going into elaborate calculation. If the salaries of the women principals of Koos' study had been included, the figures for the American principals would have been lowered a little.

In one important respect, however, the American principal has an advantage. The upper limit of his salary schedule is higher than that open to the Canadian. Twenty-five per cent of the American schools of Group IV are larger than any school which reported for this study.[2] Consequently, the upper limit of salary in this group might well be larger than the highest salary in the corresponding Canadian group, as in fact it is by $1,000. In Group III of the American schools, however, the largest enrollment is 1,150 —a figure comparable to the largest Canadian schools. The highest salary in Group III is $1,000 more than any Canadian salary reported. The most important improvement in the salary schedule of the Canadian principal which these comparisons suggest is a raising of the upper limit of salary in the largest Canadian schools. The possibility of attaining a really considerable salary at the top of any profession is one of the strongest inducements to competent men to enter the field.

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[2] The third quartile of the American schools of Group IV is 1,463 (Koos, *op. cit.*, p. 5). The largest school of the present study is 1,296.

EDUCATIONAL EXPERIENCE

Total Educational Experience

The principalship is held by an experienced group of men. The mean length of service in education for all is just short of 20 years (19.9 years), and 75 per cent of the total number have had more than 12 years of school service. Even in the smaller schools 75 per cent of principals have had 10 years or more of educational experience. These facts show that the maturity of principals is accompanied by a long period of school service. There is also a consistent advance in length of experience in moving from smaller to larger schools. The largest schools (Group IV), in which 75 per cent of the principals have had 24 or more years of school experience, are in the main administered by men who have served the school system for nearly a generation.

TABLE 31

TOTAL EDUCATIONAL EXPERIENCE OF 135 * HIGH SCHOOL PRINCIPALS, SHOWING THE FIRST QUARTILE, THE MEDIAN, THE THIRD QUARTILE, AND THE MEAN YEARS OF SERVICE FOR EACH GROUP

Group	First Quartile	Median	Third Quartile	Mean
I	10.4	15.4	24.1	17.3
II	11.3	18.6	29.7	19.7
III	12.9	23.5	30.1	21.7
IV	24.25	30.75	37.75	30.6
All	12.1	18.9	29.6	19.9

* Five of the 140 replies failed to include this item.

The extent to which experience is a conspicuous accompaniment of the Canadian principalship is made even more apparent by a comparison with the group of American principals already referred to.

TABLE 32

COMPARISON OF THE MEAN YEARS OF EDUCATIONAL SERVICE OF CANADIAN AND AMERICAN HIGH SCHOOL PRINCIPALS FOR EACH GROUP AND FOR ALL GROUPS COMBINED

Nationality	Group				
	I	II	III	IV	All
American *	9.6	11.7	14.7	20.6	13.6
Canadian	17.3	19.7	21.7	30.6	19.9

* Koos, *op. cit.*, p. 61.

The difference between the two groups is so great as to be remarkable, ranging from 69.8 per cent longer experience in Group I to 48.5 per cent longer in Group IV.

TABLE 33

LONGER EDUCATIONAL EXPERIENCE OF CANADIAN PRINCIPALS INDICATED BY THE DIFFERENCE BETWEEN MEAN YEARS OF EDUCATIONAL SERVICE AND BY THE PERCENTAGE WHICH THIS DIFFERENCE IS OF THE MEAN YEARS OF SERVICE OF AMERICAN PRINCIPALS

Measure of Difference	Group				
	I	II	III	IV	All
Difference	6.7	8.0	7.0	10.0	6.3
Per Cent of Difference	69.8	68.4	47.6	48.5	31.6

The fact that the difference for all groups, 31.6 per cent, is considerably less than for any group taken separately is due to the proportionately greater number of large schools included in Koos' study, a point which has already been made in connection with the comparison of salaries. It is not improbable that many American high school principals leave high school work for the superintendency. In the Canadian system, on the other hand, the city superintendency of schools is a position that has been very slightly developed. Whatever the cause may be, there remains the striking fact that the Canadian principal has a much longer period of service.

Analysis of the Principal's Educational Experience

Principals were asked to state, in their replies to the questionnaire: (1) how long they had served in an elementary school, (2) how long they had taught in a high school before being appointed to the principalship, (3) how long they had served as principal, (4) how long they had been in other educational positions, and (5) how long they had held their present position as principal. The total educational experience which has just been discussed is thus seen to be the sum of items (1), (2), (3), and (4). Items (1) and (2) will, therefore, indicate the teaching apprenticeship of principals; item (3) will give valuable information as to the principal's stability in his position; item (4) was designed to explore any miscellaneous educational experience which might prove to be significant; item (5) was expected to throw important light on the turnover in the principalship. A summary of the replies to items (1), (2), and (3) will now be considered. Item (4), which was found to contribute an almost negligible amount to the principal's total experience, will be disregarded.

It is somewhat surprising to find, on analyzing the principal's total experience into its constituent types, that so many high school principals have seen service in an elementary school. The data of Table 34 show that between 50 and 75 per cent (from the complete tabulation the figure is found to be 72.6 per cent) of all principals have had elementary school experience. Unfortunately, the questionnaire was not framed so as to reveal whether this elementary school experience had been in elementary school teaching or in the principalship of an elementary school. For all principals the median length of elementary school service is 3.25 years, and 25 per cent have had 5.8 years or more. A partial explanation for these facts is to be discerned in the replies which the principals made to Part 8 of Section A of the questionnaire in which they were requested to record the institutions in which they had received their professional training. An examination of these replies shows that 55 principals, or 40.1 per cent of the 135, received their earliest professional training in normal schools or model schools. The latter type of institution prepares candidates in Ontario for an inferior elementary certificate, and the former throughout the Dominion prepares typically, though not exclusively, for elementary school teaching. It is clear, then, that the great majority of high school principals have had some experience in an elementary school, that for at least half of them this experience extended over a considerable period, and that many of them, to judge from the types of schools which they attended, received their earliest professional training for elementary school teaching.

TABLE 34

NUMBER OF YEARS AND PERCENTAGES BY WHICH THE MEAN SERVICE OF CANADIAN PRINCIPALS EXCEEDS THAT OF AMERICAN PRINCIPALS

Group	Type of Experience	First Quartile	Median	Third Quartile	Mean
IV	In an elementary school	0	2.25	4.1	1.8
	In high school teaching	12.25	15.5	19.75	16.4
	In the high school principalship	7.25	12.75	14.9	11.8
	Total educational experience	24.25	30.75	37.75	30.6
III	In an elementary school	0	1.2	3.6	2.8
	In high school teaching	6.2	8.5	13.25	8.3
	In the high school principalship	4.9	8.5	14.25	9.9
	Total educational experience	12.9	23.5	30.1	21.7
II	In an elementary school	1.2	2.7	4.7	2.9
	In high school teaching	2.7	7.3	10.2	6.5
	In the high school principalship	3.7	9.5	16.5	10.0
	Total educational experience	11.3	18.6	29.7	19.7
I	In an elementary school	1.9	4.4	5.3	4.6
	In high school teaching	1.5	3.7	4.7	3.9
	In the high school principalship	3.7	6.2	11.2	8.5
	Total educational experience	10.4	15.4	24.1	17.3
All	In an elementary school	0	3.25	5.8	3.6
	In high school teaching	2.4	5.3	10.1	6.6
	In the high school principalship	4.2	7.6	14.2	9.4
	Total educational experience	12.1	18.9	29.6	19.9

* Five principals failed to give usable replies.

It may be further observed that the mean length of elementary school experience diminishes regularly from the smaller to the larger schools. The median length of such service likewise shows a regular diminution except in the largest schools. In the two groups which include the larger schools the first quartile point of elementary school experience is 0, a fact which indicates that 25 per cent or more of the principals of these larger schools have seen no service in an elementary school. The first quartile point for the same type of experience in the two groups which include the smaller schools indicates that fewer than 25 per cent of the principals of the smaller high schools are without elementary school experience. The conclusion from these facts is that the principals of the smaller high schools are more frequently recruited from men who have had experience in an elementary school.

Most high school principals have served a period of apprenticeship in an elementary school. A further and longer period of apprenticeship has been served in high school teaching. All principals reporting except 18 or 14.1 per cent[3] gave a record of some high school teaching before they were made principals. It is not therefore to be concluded that this 14.1 per cent have had no experience as high school teachers. As will appear later in this chapter, the high school principal's duties usually entail a heavy teaching schedule. For all principals the average amount of high school teaching preliminary to the principalship is 6.6 years; 50 per cent have had 5.3 years or more; 25 per cent have had 10.1 years or more, while 25 per cent have had 2.4 years or fewer. There is a marked increase in the amount of preliminary high school teaching experience in passing from the smaller to the larger schools, the difference between the means of Group I and the other three groups being as follows: between Groups I and II 2.6 years, between Groups I and III 4.4 years, between Groups I and IV 12.5 years. It is clear that a considerable period of high school teaching is a customary prerequisite to an appointment to the principalship and that high school teaching experience is highly regarded in selecting principals for the larger schools.

The combined years of elementary school experience and high school teaching experience preliminary to the principalship, as may readily be computed from the table which accompanies this discussion, stands thus:

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[3] This figure appears in the complete tabulation.

Group I	Group II	Group III	Group IV	All
8.5	9.4	11.1	18.2	10.2

These figures serve to emphasize the fact, which is already apparent, that a long period of teaching experience usually precedes appointment to the high school principalship.

In the principalship itself, the group being studied has had further experience almost as long as the teaching experience which preceded it. For all principals the mean years of service in the principalship are 9.4; 50 per cent have served 7.6 years or more; 25 per cent have served 14.2 years or more; and 25 per cent have been principals for fewer than 4.2 years. With the exception of Group III, there is a small advance in length of service in the principalship in passing from the smaller to the larger schools. A reason which suggests itself to account for the smallness of this difference is that principals do not often move from a smaller to a larger school, but once having reached the principalship tend to remain permanently in the same community. This suggestion is borne out by the situation disclosed in a subsequent table from which it appears that, on the average, principals have spent about two-thirds of their total service as principals in their present positions.

Before closing the discussion of the high school principal's experience, a further comparison with the group of American principals already referred to may be made which reveals three interesting facts. It has already been noted that the Canadian group shows a markedly longer period of total service.

TABLE 35

COMPARISON OF THE MEAN YEARS OF EXPERIENCE IN THE PRINCIPALSHIP OF AMERICAN AND CANADIAN PRINCIPALS FOR EACH GROUP AND FOR ALL GROUPS COMBINED

Nationality	Group I	Group II	Group III	Group IV	All
American	5.4	6.3	8.0	12.5	7.7
Canadian	8.5	10.0	9.9	11.8	9.4

It now appears from a comparison of the mean years of service of the two groups in the principalship (1) that the Canadian principal has a longer period of service in the principalship for all groups combined and in each of the separate groups except the fourth, (2) that the exceptional difference between the Canadian and American principals in the total period of service is due mainly to the longer period of teaching apprenticeship which the Canadian principal serves, and (3) that the difference in mean years of service in the principalship between the Canadian and American principals, while large in the smallest schools, diminishes as the schools grow larger until the difference is reversed in the largest schools. The conclusion from this fact supports the suggestion already made that the principal of a small Canadian school frequently remains permanently in a small community. Whether or not it is desirable for him to do so is another matter. The evidence suggests that he does, and, as has already been shown, he receives a salary which permits him to do so without loss of dignity.

Stability in the Principalship

Two questions were asked in the questionnaire which were designed to throw some light on the principal's stability. Principals were asked to say (1) how many years they had held their present positions, and (2) how many times during their educational service they had moved from one position to another. It is possible, therefore, to secure a comparison between the total length of time principals have served as heads of secondary schools, figures for which have already been presented, and the length of time they have served as heads of their present schools. If these two items were to coincide, it would mean, of course, that every principal then in service had served all his years as principal in the same school. How nearly they do coincide may be seen from Table 36 on the following page.

In the two groups which include the larger schools the coincidence is very close: with the exception of a very small number, men who are appointed to the headships of the larger schools remain permanently in those positions, or, if they do change their positions, move to some other branch of the educational service or out of it altogether. There is no evidence that there is much movement from one of the larger principalships to another. After extended preliminary experience, principals reach an important principalship and are satisfied to remain in the same school, and the community is apparently content to have them do so.

TABLE 36

MEAN YEARS OF SERVICE IN THE PRINCIPALSHIP COMPARED WITH THE SAME MEASURE OF SERVICE IN THE PRESENT PRINCIPALSHIP FOR EACH GROUP AND FOR ALL GROUPS COMBINED

Group	Mean No. of Years of Service	
	In the Principalship	In Present Principalship
I	8.5	5.3
II	10.0	5.8
III	9.9	9.5
IV	11.8	9.0
All	9.4	6.4

In the groups which include the smaller schools the coincidence is not so close. It is possible, however, to estimate roughly how many moves would be necessary to account for the difference when figures representing total experience in the principalship and experience in the present principalship are given. Assuming that on the average principals who move hold their second principalship as long as they do their first, and assuming that when principals answered this questionnaire they had on the average still as much time to spend in their present positions as they had already spent in them, the figures for Group II may be interpreted in this way: These principals have spent on the average 5.8 years in their present positions and $10 - 5.8 = 4.2$ years, on the average, in other principalships. The average tenure of principalships for this group is $2 \times 5.8 = 11.6$ years. The average service of 4.2 years in other principalships when the average tenure of a principalship is 11.6 years could occur if $4.2 \div 11.6$ or about one-third of the principals had moved once within the principalship. In any case the group as a whole has averaged about one-third of a move. The figures for all groups combined treated in the same way show that all the principals have averaged about one-fourth of a move.

Only 100 of the 140 principals gave exact figures for the number of times they had changed their positions during their total educational service. These 100 reported 429 moves or an average of 4.3 moves apiece. It is clear from the estimate made of movement within the principalship that the great majority of the moves were made during their years as teachers before they became heads of schools. The whole argument emphasizes unmistakably the stability of the principalship. Whether the condition makes for the efficiency of the schools is another matter. Probably extreme stability is a sign of inadequate opportunity for growth into positions of greater responsibility. Extreme instability is a sign of insecurity of tenure which repels competent men. The ideal condition lies at some unknown point between the two extremes.

THE PRINCIPAL'S ACADEMIC AND PROFESSIONAL TRAINING

Length of Academic and Professional Training Combined

In making an estimate of the professional status of any position the number of years of training which its incumbents possess is a very important measure. This training for the higher professions is frequently expressed by the number of years of study beyond the high school. Table 37 presents the data concerning the principals' academic and professional training in terms of that measure.

The figures given in this table are conservative for two reasons. (1) An unknown number of those replying must have entered college with senior matriculation standing, that is, a year's college credit. Unless the reporting principal clearly indicated this fact in his reply, no attempt was made to credit him with this year even though he reported having obtained his Bachelor's degree after three years of university study. (2) Eleven of the 140 either failed entirely to answer the section requesting an account of their academic and professional training or answered it in such a way as to make their replies unusable. These eleven replies might have been totally neglected. They have, in fact, been set down under a separate heading of ''no report'' and the percentages of years of service have been calculated on a total which included them. If they had not been included in the total the percentages under each of the headings in the table would have been slightly increased.

Just less than 10 per cent of all principals have had fewer than four years of academic and professional training beyond high school. Even this number is probably too large for reasons already stated. Moreover, a reference to Table 39 shows that only five per cent of the principals have no degree. Considerably more than half, 62.2 per cent, have received five or more years of training; 82.9 per cent have had four years or more, and more principals have pursued post-high-school studies for six or more years than have had fewer than four years of training of college rank.

TABLE 37

PERCENTAGES OF 140 HIGH SCHOOL PRINCIPALS WHO DID NOT REPORT AND WHO REPORTED ACADEMIC AND PROFESSIONAL TRAINING BEYOND THE HIGH SCHOOL VARYING FROM FEWER THAN FOUR YEARS TO SIX YEARS OR MORE

Group	No Report	No. of Years of Academic and Professional Training					
		Fewer than 4	4 or More	4½ or More	5 or More	5½ or More	6 or More
I	11.6	11.6	76.7	70.9	62.2	20.2	13.0
II	2.7	8.1	89.1	67.5	56.7	16.2	13.5
III	9.5	4.8	85.7	85.7	76.2	28.6	28.6
IV	0.0	7.7	92.4	69.3	53.9	7.7	7.7
All	7.9	9.3	82.9	72.2	62.2	19.3	15.0

In marked contrast with the situation displayed in the table setting forth the high school principal's experience, there is observable here no tendency to demand additional training from the principals of larger schools. Promotion to more responsible principalships seems to rest rather upon length of experience and ability displayed in service than upon any superior degree of academic and professional qualification. In fact the percentage of principals in Group IV, the group which includes the largest schools, who have had five or more years of training is smaller than the same percentage for any other group or for all groups combined. Presumably these principals are drawn mainly from a generation for whom less exacting standards of preparation for entering on teaching were prescribed.

A comparison between the total academic and professional training of American and Canadian high school principals shows that the proportion of Canadian principals who have received five or more years of training is more than twice as large as the proportion of American principals who have had a similar period of training. This difference may readily be accounted for by the fact that professional preparation for high school teaching in Canada is predominantly postgraduate while in the United States it is predominantly undergraduate. The result is that many high school teachers and consequently high school principals in Canada receive a preparatory academic and professional training which is half a year to a year longer, depending on the province in which the training was received.

TABLE 38

COMPARISON OF PERCENTAGES OF AMERICAN AND OF CANADIAN PRINCIPALS WHO HAVE HAD VARYING AMOUNTS OF ACADEMIC AND PROFESSIONAL TRAINING BEYOND HIGH SCHOOL

Nationality	No. of Years of Academic and Professional Training			
	Less than 4	4	More than 4	5 or More
American *	7.3	23.3	68.8	27.2
Canadian	9.3	10.7	72.2	62.2

* Koos, *op. cit.,* p. 18.

A second point of difference between the Canadian and the American groups is that among the latter an increased amount of training is characteristic of the principals of the larger schools. This condition in the American schools is a wholesome one and argues for the professionalization of the principalship in the United States. It is evident from the account of the high school principal's experience and training which has been given up to this point that the Canadian tendency is to depend almost exclusively on experience for advancement in the principalship.

The Principal's Academic Degrees

The degrees represented in Table 39 are what are usually called academic degrees. Degrees in the field of education are labeled as such; for example, the degree of B. Educ. in the University of Alberta and the B. Paed. and D. Paed. in the College of Education at Toronto. The periods of study represented by degrees in education have been included, in so far as possible, in Table 40, which sets forth the principal's professional as distinguished from his academic preparation. The only point of interest which would have been served by giving the degrees of principals in each of the four groups would be to show that of seven principals without degrees five are in the group containing the smallest schools.

TABLE 39

PERCENTAGES OF 135 PRINCIPALS IN ALL GROUPS COMBINED, WITH VARIOUS DEGREES AS THE HIGHEST DEGREE HELD AND WITHOUT DEGREES

Degree	Per Cent
Doctor's Degrees	0.0
Master's Degrees	19.3
Bachelor's Degrees	75.5
No Degree	5.2

Professional Training

In compiling Table 40, which gives a summary of the principal's professional training, some difficulty was encountered in deciding whether to record a reply under "no professional training" or under "no report." It was finally decided to include under "no report" those who reported some professional training, but gave no adequate indication of the length. Under the same heading were also included a few who failed to give data on both academic and professional training. Under the heading "no professional training" were included (1) those who definitely said "none" or "nil" or the equivalent, and also (2) those who carefully filled out the section of the questionnaire asking for academic preparation but left the section asking for professional preparation blank.

It will be observed from the table that 10.7 per cent of all principals are classified under "no professional training." This percentage represents 15 principals of whom 5 in Ontario are 60 years of age or more and have altogether 202 years of school service. This little group harks back to the days when professional training for high school teaching was either nonexistent or a novelty. Of the remaining 10, 8 scattered through other provinces range in age from 49 to 59 years. The other two are younger men. Most of the small number without professional training are men of mature years who have been long in the teaching profession.

Of all principals, a little more than two-thirds have received at least one year of professional training, and nearly a quarter (24.3

TABLE 40

Percentages of 140 High School Principals Who Have Received Amounts of Professional Training Varying from None to Two Years or More or Who Did Not Report This Item

Group	No Report	Per Cent Reporting Specified Amount of Professional Training					
		None	Less Than One Year	One Year	One Year or More	One and One-half Years	Two Years or More
I	10.1	7.2	17.4	39.1	65.2	14.5	11.6
II	2.7	13.8	13.5	45.9	72.9	16.2	10.8
III	9.5	4.8	14.3	57.1	71.4	9.5	4.8
IV	0	30.8	7.7	38.5	61.6	15.4	7.7
All	17.1	10.7	15.0	43.6	67.9	14.3	10.0

per cent) have received a year and a half or more. No regular increase of training appears as one advances from the smaller to the larger schools. Group I, the smallest schools, and Group IV, the largest schools, make a somewhat less favorable showing than the two middle groups. These facts serve to confirm a conclusion already reached in discussing experience and academic and professional training combined; namely, that experience rather than superior training is the factor which has most influence in helping a man to a more responsible principalship.

How the Principal's Working Time Is Distributed

Total Time Spent in All School Duties

Part 9 of Section A of the questionnaire was designed to find out how the principal distributed his time over the major duties of his office. It is important here to warn the reader against interpreting the replies made to this part of the questionnaire (except those giving the amount of time spent in teaching) as anything more than approximations.

The accompanying summary, therefore, represents the principal's estimate of the total time spent in school duties, with a bias, probably slight, in the direction of reporting it a little longer than it actually is. The figures will be of interest to laymen who are accustomed to think of the schoolman's day in terms of the five and one-half hour daily school schedule. Principals, too, will be inter-

TABLE 41

Distribution of Number of Hours Spent Daily in School Duties of All Kinds as Reported by High School Principals, Showing the First Quartile, the Median, and Third Quartile Points

Group	No. of Hours Spent Daily in School Duties of All Kinds		
	First Quartile	Median	Third Quartile
I	6.2	7.25	8.8
II	7.0	7.8	8.8
III	7.5	8.1	8.25
IV	7.1	7.6	8.8
All	6.6	7.6	8.7

TABLE 42

Distribution of Number of Hours Spent Daily in Teaching by High School Principals, Showing the First Quartile, the Median, and the Third Quartile Points

Group	No. of Hours Spent Daily in Teaching		
	First Quartile	Median	Third Quartile
I	5.2	5.5	5.5
II	4.25	5.15	5.5
III	1.75	2.9	3.95
IV	0	0	0.25
All	5.0	5.2	5.5

ested in examining an estimate of the time which their colleagues in schools of similar size spend on their school duties.

As many principals reported more than 7.6 hours a day as reported less. Twenty-five per cent reported more than 8.7 hours and 25 per cent reported fewer than 6.6 hours. The principals of the schools of Group I appear to spend a little less time than those in the three groups of larger schools.

Time Spent in Teaching

To those who realize how much time is required by a teacher in daily preparation if his lessons are to be fresh and embody in them the best suggestions which are published from time to time in professional books and periodicals, and how much time should be spent by a principal in the adequate administration and supervision of his school, it will be surprising to learn that seventy-five per cent of all the principals reporting have a teaching schedule of 5 or more hours a day. In the smaller schools a few principals teach more than the full day in order to cover the work required. Not before Group III is there a significant reduction of the teaching day, and it is only in the small number of largest schools included in Group IV that the principal becomes almost entirely free from classroom teaching. It is apparent from a comparison of the median time spent in teaching with the median time spent in school duties of all kinds that for the majority of principals teaching absorbs more of their working time than all other school duties combined. It is true that certain administrative duties may be done as conveniently after school hours as within them, but any genuine effort to improve the quality of instruction within the school requires that a principal have some free time while classes are in session. If a principal is expected to spend a full school day in teaching, it is hardly to be expected that he will have much energy to spend in the problems that belong to the head of the school nor much incentive to regard these problems as more than incidental.

In Group III, which includes schools of eleven to twenty teachers, there is a significant reduction in the principal's teaching load in comparison with the smaller schools of Groups I and II. Fifty per cent of the principals in this group have nearly half the day free for duties other than teaching. The striking fact about this group is the wide range of the middle 50 per cent—2.2 hours. The upper limit of the lower 25 per cent is 1.75 hours and the lower limit of the upper 25 per cent is 3.95 hours. The total range of the whole group is from 0 hours spent in teaching to a full teaching day.[4] This wide variation is a clear indication that there is little unanimity of opinion among school boards and principals as to what the principal is really there for. Many seem to think he is there to teach, doing his administrative and supervisory work if and when he can, while just as many more allow him two-thirds of the school day for duties other than teaching. The principal himself may feel somewhat diffident about claiming more time for his administrative and supervisory duties, particularly as he has no other ground than custom on which to base his claims. The high school inspector who should be the adviser of the local authorities in this respect, appears to be little better off. There is clearly a need for a better understanding of the principal's important duties on the part of school boards and their advisers. The fact that the great majority of principals spend practically a full day in teaching and the extreme variability of teaching times found in schools of middle size show that the peculiar duties of the principalship are not clearly understood.

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[4] These figures appear in the complete tabulation.

Clerical Assistance for the Principal

The free time that the principal has during the school day, or after it for that matter, should be as clear as possible from routine office work. Such work can be more cheaply and perhaps better done by competent clerical assistants. The principal needs someone to protect him from the routine inquiries of pupils, staff, and public; he needs help with the compilation and filing of important records; he needs help in making out reports; he needs help with correspondence; and he needs help with the manifolding of instructions for his staff and other material produced in quantity.

TABLE 43

PERCENTAGES OF PRINCIPALS WHO HAVE CLERICAL ASSISTANCE, WITH THE SMALLEST AND LARGEST AMOUNT OF SUCH ASSISTANCE FOR EACH GROUP AND FOR ALL GROUPS COMBINED

Group	Per Cent of Principals with Clerical Assistance	Range of Amount of Clerical Assistance	
		Lowest	Highest
I	4.3	¼ hr. a day	2 hrs. a day
II	18.9	½ hr. a day	5½ hrs. a day
III	38.1	1 hr. a day	1 full-time assistant
IV	92.3	1 full-time assistant	1 full-time 1 half-time assistant
All	21.4	¼ hr. a day	1 full-time 1 half-time assistant

Only in the largest schools is this very important need generally recognized. A minority of principals in medium-sized and small schools have clerical assistance. It may be said without fear of contradiction that 60 per cent of principals in schools of from 10 to 20 teachers are spending each week a considerable amount of time in routine clerical work which a secretary could do equally well or better—time, in fact, wasted so far as the important duties of the head of a high school are concerned. The variability of practice in the medium-sized school is a further indication that there is no consensus of opinion as to what the principalship of a high school means.

THE PRINCIPAL'S PROFESSIONAL READING

Principals were requested in Part 11 of Section A of the questionnaire to list the authors and titles of the five professional books which they had found most helpful in the past year or two. Of the 140 questionnaires returned:

(1) 76 left the space blank.

(2) 14, giving no report, made such comments as these:
''No books.''
''Kept no record.''
''A large number on vocational guidance.''
''Haven't had time much as I would like to have had.''
''My reading has been of a very general nature.''
''Do not read any such books.''
''Have little time for reading of this character.''
''Expect to read when superannuated.''
''No time for study.''
''Hard to say.''
''I would rather not make a confession.''
''Too numerous to state.''

(3) 60 gave one or more books, the total list covering 121 titles, of which only those titles which were mentioned more than once are here reproduced, together with the authors and the number of times each book was mentioned.

Of the 140 principals, 80 or approximately 57 per cent failed to report any helpful books read during the year or two previous to the date of reply. Probably the comments of the 14 who explained this omission, pretty well represent the unspoken comments of the other 76. Making some allowance for those who said ''Kept no record'' or ''too numerous to state,'' it appears that about half of the principals had read during one or two years no books of a professional nature that had impressed them as helpful. This is unfortunate. There is a wealth of new material in education ap-

TABLE 44

TITLES AND AUTHORS OF BOOKS READ IN 1923 AND 1924 AND REPORTED MOST HELPFUL BY MORE THAN ONE OF THE SIXTY PRINCIPALS WHO REPLIED TO THIS ITEM, AND THE NUMBER OF TIMES EACH BOOK WAS REPORTED

Author	Title	Times Reported
Colvin	An Introduction to High School Teaching	6
Terman	The Measurement of Intelligence	5
Wagner	Common Sense in School Supervision	4
Wells	The Story of a Great Schoolmaster	4
Dewey	Democracy and Education	3
Hall-Quest	Supervised Study	3
Judd	Psychology of High School Subjects	3
McMurry	How to Study	3
Parker	Methods of Teaching in High Schools	3
Sandiford	Comparative Education	3
Wells	Outline of History	3
Adams	Evolution of Educational Theory	2
Bagley	The Educative Process	2
Drever	Introduction to the Psychology of Education..	2
McCall	How to Measure in Education	2
Schultze	The Teaching of Mathematics	2
Thorndike	Educational Psychology, 3 vols.	2

pearing every year, to which no schoolman who is alive to the needs of his profession can afford to be indifferent. This is particularly true of the principal who, apart from his own personal interest, should feel it his duty as a supervisory officer to help his staff keep well informed. It would be unjust to frame a general indictment of high school principals. This paucity of professional reading points to a school system which takes things pretty much for granted, where initiative on the part of the local administrative officers is not much in demand, where experience is more highly regarded than professional knowledge.

Increased Responsibility and Special Training for the High School Principal

The present chapter was designed to reveal the character of the local leadership in secondary schools. The inquiry has shown that high school principals as a body possess many admirable characteristics. They are mature men with long experience in school work and a considerable period of academic and professional training; they show a high degree of stability, and the importance of their position is recognized by a respectable salary. On the other hand, there is evidence that the special duties of the principalship and the value of special training are not adequately recognized. The principal's teaching load is, on the whole, so heavy that little time and energy are left for the duties that devolve upon him as the head of the school. Among schools of medium size the great variation in the time which the principal has free from teaching shows a prevailing uncertainty as to the real importance of his duties as principal. Long experience appears to be a better qualification for a more responsible position than special training, and, finally, the principal seems to have little time or incentive to keep up to date through professional reading. The conclusion is inevitable that experience and the consequent familiarity with the system in which the principal works is more important than initiative and special training.

If the position of principal is to be strengthened, the following points should be recognized: (1) that the duties already required of the principal require special training; (2) that the principal's responsibility should be increased so that his leadership in the local administration of secondary education will be more clearly appreciated by himself and his board; and (3) that the principal's responsibility and the special training involved should be recognized by an appropriate certificate.

References in provincial regulations to the duties of the high school principal are as a rule cursory or nonexistent. The Ontario regulations, however, contain a detailed statement of his duties[5] which may be taken as representing rather closely what is expected of him throughout the country:

> 1. The Principal of a High School or Collegiate Institute shall have supreme authority in all matters of discipline in his own school.
>
> 2. When the Public and High Schools occupy jointly a school building or school grounds, the authority of the Principal of the High School shall be supreme in all matters of discipline of those parts of the accommodations which the schools occupy in common.
>
> 3. It shall be the duty of the Principal:
>
> (*a*) To admit no pupil who is not eligible for admission under the High School Entrance Regulations.

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[5] Department of Education, Regulations of the High Schools and Collegiate Institutes, 1922, pp. 10, 11, 12.

(*b*) To admit no pupil who has been enrolled in another High School or in a Continuation School, unless he presents a letter of honorable dismissal from the Principal of the school he last attended. In the event of a dispute, the parties thereto shall submit full particulars of the question to the Inspector of the school into which the pupil seeks admission.

(*c*) To be responsible for the registration of pupils, and to keep such records and make such reports as may be required from time to time by the Board or the Department of Education.

(*d*) To see that a uniform system of marking the attendance is observed throughout the school, and that a permanent record is kept of the school history of every pupil.

4. It shall be the duty of the Principal:

(*a*) To determine the numbers of Forms, the number of pupils to be assigned to each Form, and to make such promotions from one Form to another as he may deem advisable.

(*b*) To determine the order in which the subjects in each Form shall be taken up by the students and to assign the subjects of the course of study among the teachers, subject to the Regulations.

(*c*) To exercise general supervision over the homework assigned by the members of his staff and to call his staff together from time to time for the discussion of all matters affecting the welfare of the school.

(*d*) When the school opens, and as often thereafter as may be necessary, to explain to the pupils their duties, the courses of study and the requirements of the examinations for which they may be preparing, and such of the provisions of the Law and Regulations as apply to them.

5. It shall be the duty of the Principal:

(*a*) To make, as far as practicable, suitable arrangements for the oversight and comfortable accommodation of those pupils whom he has permitted to present themselves in the school building before 8:45 A.M., and of those whom he has permitted to remain in the school building during the noon recess or after the close of school; also for the supervision of the playgrounds.

(*b*) To give assiduous attention to the health and comfort of the pupils, to the cleanliness, temperature and ventilation of the school building, to the care of all maps, apparatus, and other school property, to the preservation of shade trees, and the orderly arrangement and neat appearance of the playground.

(*c*) To report promptly to the Board and to the municipal health officer the appearance of any infectious or contagious disease in the school, or the unsanitary condition of the school building, lavatories, or surroundings.

(*d*) To refuse admission to the school of any pupil whom he believes to be affected with, or exposed to chicken pox, smallpox, cholera, glanders, scarlet fever, scarlatina, diphtheria, whooping cough, measles, mumps or consumption, or other infectious or contagious disease, until furnished with a certificate of a medical health officer or of a duly qualified medical practitioner approved by him, that all danger that would arise from the presence of such pupil has passed.

(*e*) To suspend any pupil guilty of persistent truancy, or persistent opposition to authority, habitual neglect of duty, the use of profane or improper language or conduct injurious to the moral tone of the school, and to notify the parent or guardian of the pupil, and the Board, of such suspension.

NOTE: The parent or guardian of any pupil so suspended may appeal against the action of the Principal to the Board, which shall have power to remove, confirm, or modify such suspension.

6. If the parent or guardian, after reasonable notice by the Principal, fails to pay the school fees of his child or ward, or to provide him with the textbooks or other supplies required in his course of study or to pay the fees imposed for such purpose by the Board, the Principal shall notify the Board promptly of such neglect, and the Board may suspend the pupil, or it may itself provide the needed textbooks and supplies and may exempt the pupil from the payment of fees.

7. If a pupil injures or destroys school property, the Principal shall report the matter to the parent or guardian, and if within a reasonable time the parent or guardian fails to make good the damage, the Principal shall submit the matter promptly to the Board for settlement.

8. When so requested, the Principal shall furnish the Minister or the Inspector with any information which it may be in his power to give respecting the condition of the school premises, the discipline of the school, the progress of the pupils, and any other matter affecting the interests of the school, and shall prepare such reports to the Board as it may require.

9. When, under the *High Schools Act*, a Board appoints a Day or Night School Supervising Principal, the duties and powers of the other Principals shall be subject to such modifications as may be made by the Board, with the Minister's approval.

From this list of duties it is not difficult to pick several for which special training would be highly important, for example, those concerned with:

1. The discipline of the school.
2. School records and reports.
3. The school time-table.
4. Promotions.
5. School hygiene.
6. Staff meetings.

At the same time the list of duties given is rather narrow and specific. The principal's responsibilities might well be conceived of in a much broader way. Briggs considers that they fall under three main heads:[6] (1) the organization and administration of his school; (2) the direction of the social life of the pupils; (3) the improvement of subject matter and instruction. The first of these includes most of the items in the Ontario regulations. The second emphasizes the importance of the wise direction of the whole range of student activities which are coming to be such an important feature of the modern high school. The third recognizes in the first place that the principal should be responsible for the improvement of instruction in his school, a matter on which the regulations quoted are silent, and about which there is at present much uncertainty in actual practice.[7] Plans for the improvement of instruction need not be confined to classroom supervision, but they will take much time and thought. The second element of the third main function recognizes the principal's place in the improvement of subject matter. So far the principal has small latitude in this respect. If the reduction in provincial examinations goes on, and if decentralization of curriculum control continues to grow from its present beginnings, this function will tend to become increasingly important.

So far Ontario is the only province which has a high school principal's certificate. This certificate requires the ordinary preparation for high school teaching and three years of successful high school teaching experience.[8] If the important duties of the principal already devolving upon him are to be adequately performed, and particularly if the increased responsibilities which have been suggested are placed upon him, the necessity of special training for the high school principalship should be definitely recognized.

SUMMARY

In the present chapter an analysis has been presented of the status of the high school principal and suggestions for increasing his responsibility and professional training have been made. High school principals were found to be distinguished for experience and stability rather than for special training and opportunity for individual initiative. In accordance with the point of view taken throughout this study that local responsibility for education should be fostered, it was suggested that the leadership of the high school principal in the local administration of secondary education should be recognized by incorporating in the regulations statements which would definitely place upon his shoulders wider powers in connection with the social direction of his school and the improvement of subject matter and instruction. If such responsibilities are to be met by the principal, special training therefor and an appropriate certificate appear to be highly desirable.

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[6] Philadelphia School Survey, 1921, Book II, p. 104.

[7] Provincial high school inspectors spend on the average 1.47 hours per year in the classroom of each teacher in the system. (Derived from replies to section C1 (*b*) (3) of the Questionnaire to High School Principals.) Principals also spend time in classroom supervision. The median amount is .17 of an hour per day for 123 schools of various sizes. In schools with from 11 to 20 teachers some principals spend no time in classroom supervision; others as much as 2 hours a day. (Derived from section A9 (*d*) of the Questionnaire to High School Principals.)

[8] Department of Education, Regulations of the High Schools and Collegiate Institutes, 1922, p. 10.

CHAPTER XI

THE CURRICULUM

INTRODUCTION

All of the main characteristics of a system of schools may be found reflected in the organization of its studies. Thus provincial autonomy, centralization of provincial control, pioneer conditions of development, the rise of a democratic secondary school, which have been called the principal influences at work in Canadian secondary education, might each in turn serve as texts for the present discussion. In fact the first three, important as they are, will receive little more than incidental mention in the present chapter. With respect to provincial autonomy, differences between provinces will be noted but not stressed. Although centralization of provincial control will readily be discerned throughout, no special attempt will be made to analyze its influence. Dr. Spence [1] has already offered a severe indictment of centralized control of the curriculum with particular reference to Ontario. With respect to pioneer conditions of development, a comprehensive investigation of the organization of studies in continuation classes and smaller high school groups is an important task which still remains to be undertaken. The data of the present chapter concerning school time-tables are drawn from schools with three or more high school teachers.

The last of the four characteristics, however, will receive considerable emphasis. An investigation of the comparative importance of high school studies, which forms the first topic of the present chapter, will afford an opportunity for judging whether the present range of studies is sufficiently catholic to serve the interests of the expanding high school population. The organization of the curriculum in provincial programmes and school time-tables, which forms the second principal topic, will serve to show, among other items, the extent to which a democratic differentiation at the secondary level operates. To illustrate this condition, the organization of studies in three provinces, Ontario, Alberta, and Quebec

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[1] Spence, Ruth Elizabeth, Education as Growth, Chaps. V, VI, and VII.

(the Protestant system) will be presented. The time-tables of schools in other provinces will be found in Appendix D.

COMPARATIVE IMPORTANCE OF HIGH SCHOOL STUDIES

Number Studying the Various Subjects

Table 45 presents an account of the number of pupils studying thirty-two subjects in six provinces. The complete tabulation by provinces is given in Appendix D. The sampling included 89,383 pupils, of whom considerably more than half are from Ontario. An interpretation of this table must be qualified by several considerations.

In the first place the Dominion Bureau of Statistics which compiles the figures from which the table is arranged does not state what types of schools are included. It is certain that the 6,987 full-time pupils in day vocational secondary schools are not included. The total sampled from Ontario exactly equals the number of pupils in collegiate institutes, high schools, and continuation schools. Had these vocational pupils been included, the result would have been to extend the number of subjects to include a greater variety of a technical and a commercial nature and to give somewhat more weight to the body of practical courses. The inclusion of these pupils, however, would not appreciably alter the general complexion of the table.

In the second place, the figure for the total sampled in Saskatchewan is the same as the number of pupils found in the collegiate institutes and high schools, and that for Alberta is the same as the number enrolled in high schools. In both these provinces the pupils not sampled, in each case about half, are found in the smaller schools, which confine themselves more strictly to the academic subjects. The totals for Nova Scotia and British Columbia represent all the high school pupils of these provinces.

In the third place, the Dominion Statistician is careful to say that a blank in the table does not necessarily mean that the subject was not taught. It merely means that the figures were not reported. A subject like music, for example, would offer some difficulty. A school might readily fail to report the subject where some attention was given to singing but where a regular course in music was not offered. Or, again, schools might fail to report physical culture, as in the case of Nova Scotia, where it is highly probable that some attention is given to it under the regulations of the Department which make physical training imperative in all schools.[2] On the whole, there is not much likelihood of serious deficiencies from this source. The only serious omission detected was physiography, a one-year course given in Ontario. This item has been supplied.

TABLE 45

NUMBER OF PUPILS IN PUBLICLY CONTROLLED SCHOOLS TAKING CERTAIN SECONDARY GRADE SUBJECTS IN SIX PROVINCES, 1923

Subject	No. of Pupils
1. English	86,229
2. Algebra	66,291
3. French	65,492
4. History	64,293
5. Physical Culture	57,267
6. Latin	56,610
7. Geometry	50,367
8. Arithmetic	39,944
9. Geography	35,617
10. Art	29,268
11. Botany	24,170
12. Physics	23,559
13. Chemistry	19,885
14. Physiography	13,804
15. Reading	10,775
16. Zoölogy	10,437
17. Elementary Science	8,167
18. Manual Training	7,759
19. Bookkeeping	7,201
20. Household Science	6,727
21. Physiology	4,957
22. Agriculture	4,458
23. Typewriting	4,041
24. Stenography	4,017
25. Trigonometry	3,321
26. Military Drill	3,220
27. Business Law, etc.	2,756
28. Music	2,473
29. German	2,140
30. Practical Mathematics	1,917
31. Greek	389
32. Spanish	330
Total Sampled	89,383

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[2] Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction of Nova Scotia, 1921, Regulation 174.

With the exceptions already mentioned whose combined influences would probably tend to extend the range of vocational subjects somewhat, to add a little more weight to the academic subjects, and to introduce into the list certain subjects whose status varies between that of a regular course and an incidental activity, the table may be accepted as presenting a true picture of the facts.

The first striking fact about the table is the commanding position of English, which stands easily at the head of the list. It will perhaps be a surprise to find algebra in second place, taking precedence over history and any of the foreign languages. In order to find music, German, and Greek, one must read to the bottom of the list, passing on the way such subjects as bookkeeping and military drill. French, of course, deserves a high place in the Canadian curriculum, but one cannot help deploring the depressed condition of German and the almost complete disappearance of Greek. The position of music, close to the bottom of the list, seems indefensible on any grounds. On the practical side agriculture appears unfortunately low in the scale.

In the numbers of pupils studying the various subjects, there is good evidence for the statement that the backbone of the secondary curriculum in Canada is made up of five branches: English; mathematics, including arithmetic, algebra, and geometry; foreign languages, almost exclusively Latin and French; the social studies, history and geography; and science, embracing physics, chemistry, physiography, botany, zoölogy, and the composite of two or more of these called elementary or general science. Art, too, holds a high place mainly because in many provinces it is a required subject for prospective elementary school teachers.

The general direction of secondary studies is obvious. There are, however, some significant variations between provinces which deserve attention. These can be observed more easily from Table 46 (arranged from the complete table in Appendix D) where the highest sixteen studies for each of the six provinces and for all six combined have been arranged in rank order from one to sixteen in the order of their importance as measured by the number of pupils taking them. English maintains its high position. Ontario is conspicuous in the attention paid to physical education; this may be explained in part by the fact that the majority of Ontario high school pupils are housed in separate high school buildings which often have gymnasiums. Ontario is also exceptional in putting mathematics below foreign languages. Alberta is remarkable for the high place given to history, the low place accorded to Latin and French, and the high place occupied by elementary science.

TABLE 46

HIGHEST SIXTEEN SUBJECTS RANKED ACCORDING TO THE NUMBER OF PUPILS TAKING THEM IN SIX PROVINCES

Rank	Nova Scotia	New Brunswick	Ontario	Saskatchewan	Alberta	British Columbia	Six Provinces
1.....	English	English	English	English	History	English	English
2.....	Algebra	History*	Physical Educ.	Geometry	English	Algebra	Algebra
3.....	Arithmetic	Geography*	French	Algebra	Geometry	Geometry	French
4.....	French	Algebra	History	History	Algebra	French	History
5.....	Geometry	Botany	Latin	Arithmetic	Elem. Science	Latin	Physical Educ.
6.....	History	Geometry	Algebra	Physiology	Arithmetic	Arithmetic	Latin
7.....	Physics	French	Geometry	French	Physical Educ.	Chemistry	Geometry
8.....	Geography	Arithmetic	Geography	Latin	Art	Geography	Arithmetic
9.....	Art	Latin	Art	Physical Educ.	French	History	Geography
10.....	Latin	Bookkeeping	Arithmetic	Elem. Science	Latin	Art	Art
11.....	Botany	Physiology	Botany	Music	Geography	Physics	Botany
12.....	Chemistry	Physics	Physiography	Physics	Physics	Manual Training	Physics
13.....	Practical Math.	Elem. Science	Physics	Geography	Chemistry	Botany	Chemistry
14.....	Military Drill	Chemistry	Zoölogy	Chemistry	Military Drill	Househ'd Science	Physiography
15.....	Agriculture	Art	Chemistry	Art	Agriculture	Stenography	Zoölogy
16.....	Trigonometry	Trigonometry	Bookkeeping	Military Drill	Music	Typewriting	Elem. Science

* History and geography have equal rank in New Brunswick. The numerical ranking for each should be 2.5.

Subjects Weighted on Basis of Combined Effect of the Number Studying Each and the Weekly Time Allotment

A table showing the numbers of pupils studying a series of subjects in any year must not be pressed to give meaning which it cannot properly yield. Table 45 merely lists the number of pupils studying the various subjects. It shows only roughly the relative weighting of the various subjects in the curriculum. A pupil, for instance, studying English five periods a week may be equated with a pupil studying geography for two periods a week. In a table showing the number of pupils studying certain subjects, these two pupils are given equal weight, which they obviously do not have. A better unit of measurement for estimating the relative importance of subjects—one which would take into consideration the time as well as the numbers—would be the weekly pupil-minutes spent on each subject. The facts reported by the high school principals in Section E of the questionnaire (see Appendix C) allow such a unit to be calculated. In this section principals were requested to give information as to the number of periods and the number of minutes per week allotted to each subject offered by the school in each year of the respective courses.

The weekly pupil-minutes are obtained from the product of the number of pupils studying a subject and the number of minutes per week assigned to that subject in the time-table. The figure for the numbers studying the various subjects has already been given. The time figure was calculated thus:[3]

(1) In each school the number of minutes per week in the several years of any course were added; for example, for algebra in school "X" province "Y," 120 minutes per week in grade IX, added to 180 minutes in grade X added to 120 minutes in grade XI gives 420 minutes for the three-year course.

(2) The total of the minutes per week in the several years was divided by the number of years in which the subject was given. Continuing the same sample, 420 is divided by 3 to give the mean number of minutes per week devoted to algebra, in this supposed case 140.

(3) The same plan was followed for each subject offered by each school.

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[3] The results of the calculations will be found in Appendix D.

(4) Average for the several provinces were determined by taking the means of the figures found under (2) and (3).

The next step was to combine the time factor with the number of pupils studying a subject. This was done by taking the hundreds of pupils studying any subject in any province and multiplying this figure by the minutes per week devoted on the average to that subject. The quotients, rather unwieldly figures, were then reduced to a convenient size by dividing them by the total pupil-minutes per week for English. The result is to give to English a weight of one, or one hundred, and to the other subjects weights expressed as percentages of the weight of English. The results are shown in Table 47 for the twelve subjects in five provinces which ranked highest, and for the five provinces combined. Subject to the defect arising from a small number of schools in some provinces, it is considered that Table 47 gives a fairly accurate estimate of the relative weights of the subjects included. Particularly is this true of the weights for Ontario and for the five provinces combined. In the

TABLE 47

RELATIVE WEIGHTS OF TWELVE IMPORTANT HIGH SCHOOL SUBJECTS IN FIVE PROVINCES, TOGETHER WITH THE RANKING OF THE SUBJECTS FOR EACH PROVINCE AND THE FIVE PROVINCES COMBINED

Subject	Five * Provinces	Nova Scotia	Ontario	Saskatchewan	Alberta	British Columbia
English	100 (1)	100 (1)	100 (1)	100 (1)	100 (1)	100 (1)
French	56 (2)	52 (4)	59 (2.5)	43 (5)	29 (7)	70 (2)
Algebra	55 (3)	72 (2)	52 (6)	46 (3)	57 (4)	64 (3)
Latin	52 (4)	32 (7)	59 (2.5)	42 (6)	23 (9)	52 (5)
History	49 (5)	35 (6)	55 (5)	53 (2)	61 (2)	21 (10)
Elementary Science † ..	47 (6)	15 (11)	56 (4)	29 (8)	58 (3)	18 (12)
Geometry ...	32 (7)	36 (5)	34 (7)	45 (4)	34 (5)	63 (4)
Arithmetic ..	30 (8)	56 (3)	24 (9)	41 (7)	33 (6)	32 (7)
Geography ..	24 (9)	30 (8)	26 (8)	13 (11.5)	14 (10.5)	24 (8)
Art	22 (10)	22 (10)	23 (10)	13 (11.5)	25 (8)	20 (11)
Physics	20 (11)	29 (9)	18 (11)	24 (9)	13 (12)	22 (9)
Chemistry ...	17 (12)	12 (12)	15 (12)	22 (10)	14 (10.5)	33 (6)

* New Brunswick is omitted from this and subsequent calculations because of the small number of schools (2) which sent time-tables.

† Elementary science represents one or more of botany, zoölogy, physiography, general science, elementary science.

latter case the figures are based in no case on fewer than 19,885 pupils (the number studying chemistry), and in no case on the weekly time allotment of fewer than thirty-nine schools (the number of schools reporting one or more of the subjects included under elementary science).

The computation would have been more satisfactory if the whole range of the subjects offered could have been treated in this manner. As it was, some subjects were so seldom reported that the time factor would have been doubtful, or a subject found in one province was not found in another. As a consequence, the calculation was limited to the major branches of study found in all the provinces. The relative status of subjects less commonly found must be inferred from the table of the number of pupils studying them which has already been given.

The most striking result of this reärrangement is to give English a much greater predominance. It now appears to have nearly double the weight of any other single subject in the curriculum. Another change worthy of note is that French and Latin assume somewhat greater importance, rising for the five provinces combined from third and sixth places to second and fourth places respectively.

A simplification of Table 47 is given in Table 48 where English, the mathematical subjects (arithmetic, algebra, and geometry), the science subjects (physics, chemistry, and elementary science), the foreign languages (French and Latin), and the social studies (history and geography) are presented with their respective weightings to show the relative importance of the five principal branches of secondary study in the five provinces considered. The absence from the table of less frequently studied subjects, such as German, trigonometry, and agriculture, tends to depress slightly the weights of foreign language, mathematics, and science respectively. No such absences from the fields of English and the social studies need be considered. Grouped in this way mathematics is seen to be the dominant branch of study in every province represented but Ontario and also for the five provinces combined; English and foreign languages are about equal, with a striking exception in the case of Alberta where foreign languages are clearly under a cloud; science and the social studies stand in fourth and fifth places both separated by a considerable gap from the lowest of the other three branches.

From these considerations one thing at least is clear: if the secondary schools of Canada wish to take stock of themselves a task of major importance lies in making a close scrutiny of the contribution which present courses in mathematics are making to a liberal education.

TABLE 48

RELATIVE WEIGHTS OF FIVE MAJOR BRANCHES OF SECONDARY STUDY IN EACH OF FIVE PROVINCES AND FOR FIVE PROVINCES COMBINED

Subject	Nova Scotia	Ontario	Saskatchewan	Alberta	British Columbia	Five Provinces
English	100	100	100	100	100	100
Foreign Languages	84	118	85	52	112	108
French						
Latin						
Mathematics	164	110	132	144	159	124
Algebra						
Geometry						
Arithmetic						
Science	56	89	75	85	73	84
Physics						
Chemistry						
Elementary Science						
Social Studies ...	65	81	66	75	45	73

The Relative Values of Studies

The facts presented in the two preceding sections raise important questions relative to the proper emphasis upon the various studies of the secondary school. In particular, it may be asked whether there is any justification in a true scheme of educational values for the fact that mathematics has in the country as a whole nearly the weight of the natural sciences and the social studies combined (mathematics 124, natural sciences and the social studies 157), and in three provinces has more than the weight of the two together. Is there, further, any justification for foreign languages holding a position consistently higher (Alberta is the only exception) than either the natural sciences or the social studies? Again, is there any justification for the position of the æsthetic subjects, music being practically nonexistent, art regarded mainly as a preprofessional study for elementary school teachers, and the main burden being borne by English literature which too frequently, it is to be feared, is taught in a minutely critical spirit? In fine, is there any justification for the emphasis upon the formal studies in comparison with what may be called the content and æsthetic studies?

The answers to these questions will depend to a considerable extent upon one's view of the formal discipline theory of studies. If one adheres to the dogma that there are faculties of the mind which may be developed by any rather difficult subject and which then will operate with equal power in dealing with any subject matter indifferently, he will be likely to regard the present distribution of studies in the high schools with favor. He will at the same time be in opposition to the findings of modern psychological theory and educational research. His answer will also be influenced by his view of the degree of selection which should be exerted by the secondary school. The higher the degree of selection he approves the more likely he is to be satisfied with a rather narrow academic curriculum. To one who is not satisfied with the formal discipline theory of studies and who regards secondary education as the opportunity of the many rather than the privilege of the few, the following bases of evaluation are suggested.

In the first place, no better starting point can be found than Professor Dewey's statement of the meaning of true culture: ''And there is perhaps no better definition of culture than that it is the capacity for constantly expanding the range and accuracy of one's perception of meanings.''[4] It is through a study of the natural and social sciences primarily that the meanings of events become clarified and extended. The accuracy with which these meanings are perceived depends upon the employment of the quantitative science of mathematics and upon the possession of an accurate vocabulary. Thus the outstanding importance of the natural and social sciences becomes apparent and the linguistic and mathematical studies appear in proper perspective. On the basis of this criterion the natural and social sciences deserve a more important position than they now hold.

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[4] Dewey, John, Democracy and Education, p. 145.

In the second place, in addition to understanding his world, man needs a sense of values; he needs ideals as well as ideas. The cultured man is distinguished by the possession of fine feeling as much as by the possession of clear ideas. It appears to be the province of art—literature, music, the pictorial and plastic arts—to develop in one a sense of value or a fineness of feeling without which intellectual powers may be misdirected or cold. If this criterion be accepted, the curriculum appears to be overweighted on the intellectual side.

In the third place, a balanced curriculum should make provision for acquiring the most useful skills and special abilities. An adequate command of the abilities involved in speaking, writing, and reading the English language would seem to demand first consideration. These abilities have an important place in the present curriculum. At the same time the authors of the British Columbia Survey criticized the curriculum in that province on the ground that it was prevocational in a narrow sense. Their judgment [5] that "up to the present our secondary schools have given prevocational training to favored classes" strongly suggests that some special abilities (such as the ability to use a foreign language), are now stressed on the ground that they are preparatory to the learned professions, at the expense of other special abilities important either in the lives of most people (those included in the household and manual arts), cr for those who expect to fill positions in the middle levels of commerce and industry. The acceptance of this criterion would lead to a greater emphasis than is now apparent upon practical subjects including vocational training.

Provincial Programmes and School Time-Tables

The present section will deal with the manner in which provincial programmes of studies are incorporated into the time-tables of the schools with particular reference to differentiation at the secondary level. The sources of the data are, in the main, the provincial programmes published by the several Departments of Education and the answers given by principals to Section E of the questionnaire.

As the varying needs of a growing high school population become apparent, the organization of studies tends to change from a single-track curriculum with a few designated options to a group of curricula with a core of obligatory studies. The organization of studies in the high schools of Canada appears to be involved in this change. The Province of Ontario represents the movement at its most advanced stage; Alberta is in process of transition from a single-track curriculum to a group of curricula; the Protestant system of Quebec has the single-track curriculum. These three provinces have been chosen for illustration in some detail. The organization of studies in the schools of the other provinces except New Brunswick and Prince Edward Island may be seen in the school time-tables and appended explanations which are given in Appendix D.

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[5] British Columbia, Survey of the School System, p. 85.

Ontario

A Typical Time-Table.—Table 49 gives the time-table of a typical Ontario high school, based on the time-tables of forty medium- and large-sized schools which replied to Section E of the questionnaire. The time allotted to the successive years of the various courses is based on the average of thirty-five of the forty schools which gave an accurate report of the number of minutes per week in each year. The notes appended to the table give the significant variations among the forty schools. Parentheses have been placed around the figures for any courses or years of any course which are not typically offered.

With the aid of the high school time-table and the provincial programme of studies, it is not a difficult matter to indicate the majority of courses which various groups of pupils will study from year to year. In the first place certain courses are obligatory upon all pupils. The following courses must find a place in every curriculum.[6]

(1) English (composition and literature) through the four years of the Lower and Middle Schools.

(2) Canadian history and civics, and physiography in the Lower School (each for one year and not concurrently).

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[6] Department of Education, Courses of Study and Examinations of the High Schools, Collegiate Institutes, and Continuation Schools, Revised, 1924, pp. 7, 8, 11, 12. Manners and morals are to be taught "incidentally" in every year. Oral reading is to be taken up with the study of English literature, and every teacher on the staff is expected to pay attention to writing and spelling.

(3) Algebra and geometry in the Lower School (each for one year and not concurrently).
(4) Physical culture (in every year).

The Matriculation Curriculum: Pupils may enter the universities at the end of either the fourth or fifth year. When the fifth year is taken in high school pupils usually receive credit in the first year of the Faculty of Arts for such subjects as they have taken successfully. The examination at the end of the fourth year known as Pass Matriculation is taken in the following subjects of the Middle School: English (literature and composition), British history, ancient history, algebra, geometry, Latin, two of Greek, French, German, Spanish or Italian, science (physics and chemistry, or agriculture and horticulture).[7]

To satisfy examination requirements on the two optional subjects, pupils will usually take French and science (physics and chemistry) because, as has been shown in the notes on the Ontario time-table, these are the courses more frequently offered. A pupil therefore, who is preparing to enter college in four years will be able to meet the college entrance requirements and the subjects required of all pupils by following as a prescribed minimum the curriculum shown in Table 50. The most frequent variation in the minimum curriculum is the substitution of German for physics and chemistry. The pupil preparing for college, therefore, has a minimum of prescribed work covering at least five prepared subjects in each of his first two years and at least six prepared subjects in his third and fourth years. The regulations of the Department require each pupil to take at least five subjects in each year of the Lower and the Middle Schools and permit him to take as many as eight, but not more.[8] In making up the maximum physical culture, manual training, household science, and music do not count.[9] No data are available to show in detail what additional work matriculation pupils usually undertake. Table 49 lists the subjects among which such choice may usually be made.[10]

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[7] Department of Education, Courses of Study and Examinations of the High Schools, Collegiate Institutes, and Continuation Schools, Revised, 1924, p. 78. (But now, 1927-28, ancient history is optional with music.)

[8] *Ibid.*, p. 8.

[9] *Ibid.*, p. 9.

[10] *Ibid.*, p. 9.

TABLE 49

TIME-TABLE TYPICAL OF THE ONTARIO HIGH SCHOOL OF MEDIUM OR LARGE SIZE, 1923-24

Subject	No. of Periods per Week in Each Year				
	Lower School		Middle School		Upper School
	First Year	Second Year	Third Year	Fourth Year	Fifth Year
English	5–6	5–6	5–6	5–6	5–6
French	4	4	4	4	4–5
Latin	4–5	4–5	4–5	4–5	4–5
German	–	(4)	4	4	4
Greek	–	(4–5)	(4–5)	(4–5)	(4–5)
Arithmetic	–	4–5	–	–	–
Algebra	5–6	–	5–6	–	–
Geometry	–	5	–	5	4–5
Trigonometry	–	–	–	–	3–4
Botany	4–5	–	–	–	(4–5)*
Zoölogy	–	4–5	–	–	
Physics	–	–	6	–	4–5
Chemistry	–	–	–	6	4–5
Physiography	–	4–5	–	–	–
Geography	4	–	–	–	–
Canadian History and Civics	4	–	–	–	–
British History	–	–	4–5	–	–
Ancient History	–	–	–	4–5	–
Modern World History	–	–	–	–	4
Art	4–5	–	–	–	–
Physical Education	3	3	2	2	2
Agriculture	(4–5)	(4–5)	–	–	–
Manual Training	(2–4)	(2–4)	–	–	–
Household Science	(2–4)	(2–4)	–	–	–
Commercial	Commercial courses may still be given as outlined in the programme for high schools and collegiate institutes but are more frequently carried on in a separate school or department under the Vocational Education Act.				

NOTE: Periods are on the average 40 minutes in length except physical education which runs from 30 to 40 minutes. (See note on time allotment in the extended notes which follow.) Parentheses indicate that a course or part of a course, while not typically offered, is found with sufficient frequency to be significant.

* Biology.

Time-Allotment.—Table 49 gives an appearance of uniformity in time allotted to the various subjects greater than the actual facts warrant. It must be remembered that in Ontario standardization is based on uniform textbooks, a uniform programme of studies, and uniform examinations, and not upon any prescribed time allotment such as the unit system in the United States.

An examination of the time-tables of 37 medium and large schools shows that 40 minutes is the modal (though not the median) length of period. The facts in detail are as follows:

Length of Period	Number of Schools
30	1
33	1
35	10
38	9
40	12
43	2
45	2
	37

Where a school reported periods of varying length an approximate average was taken.

The number of periods per week allotted to the various subjects also varies considerably. The figures in the table for number of periods are secured by taking the arithmetic mean of the number of minutes devoted each year to a subject in 35 schools and dividing this figure by 40, the modal length of period.

English. Pupils are permitted to take the Middle School examination in English at the end of the third year if the principal recommends it. These pupils, if they are successful, may take Upper School English in the fourth year.

German. The practice with regard to German varies. Of the 29 schools reporting German, 15 begin it in the Middle School, 12 in the second year of the Lower School and 2 in the Upper School.

Greek. Greek is not typically offered. Only 13 of the 40 schools report it, and they arrange the course in one, two, three, or four years.

Arithmetic. Arithmetic appears regularly in the second year and is always a one-year course. Four of the 40 schools put it in the first year.

Algebra. Twenty-three of the 40 schools have precisely this arrangement in the Lower and Middle Schools. Of the other 17 the most common variant, found in 9 schools, is to add a further year of algebra.

Subject	First Year		Second Year		Third Year		Fourth Year	
Algebra	4–5	40	....		2–3	40	4–5	40
Geometry	....		4–5	40	4–5	40	....	

The other 8 schools have slightly different plans.

NOTES ON ONTARIO TIME-TABLE—(*Continued*)

Botany, Zoölogy. Thirty of the 40 schools have exactly this arrangement in the Lower School. Only one school reverses the botany-zoölogy sequence. The other nine either do not offer these subjects or offer only one of them.

Physics, Chemistry. Fourteen of the 40 schools have this arrangement in the Middle School; 9 put chemistry in the third year and physics in the fourth. The most common variant among the remaining 17 is to have both physics and chemistry in both years of the Middle School. Seven schools have this plan. The other 10 have other arrangements.

Upper School Science. The arrangement of these courses in the Upper School, as might be expected from the options permitted, varies considerably. In detail the facts are:

No Upper School Science	7 schools
Upper School chemistry only	5 schools
Upper School physics only	4 schools
Upper School chemistry and biology only	1 school
Upper School physics and chemistry only	9 schools
Upper School physics, chemistry, and biology	14 schools
Total	40 schools

Physiography. Physiography appears in this place in 39 of the 40 schools. The omission in the report of the 40th school was probably an oversight.

Geography. With one exception among the 40 schools, geography appears as a first-year subject. In the single school it appears in the second year.

History. The history sequence is exactly as given in 29 of the 40 schools. The other 11 have various other arrangements thus:

(1) Same sequence in Lower and Middle School; no Upper School history	3 schools
(2) A year of ancient history followed by a year of British history in the Middle School	2 schools
(3) A year of British history and a year of ancient history taken concurrently	1 school
(4) British history in both years of the Middle School; ancient history in the second only	3 schools
(5) Ancient history in both years of the Middle School; British history in the first only	1 school
(6) Both British and ancient history in both years of the Middle School	1 school

Art. Of the 40 schools 27 place art as given. In the other 13 art is offered as follows:

(1) Not offered	1 school
(2) In the second year only	7 schools
(3) Two years in the Lower School	4 schools
(4) Two years in each of the Lower and Middle Schools	1 school
Total	13 schools

NOTES ON ONTARIO TIME-TABLE—(*Continued*)

Physical Education. The arrangement of physical education is as given for 15 of the 40 schools. The other 25 have a large number of variations while preserving approximately the same time allowance.

Agriculture. Agriculture cannot be called a typical subject for the medium-sized and large schools, only 10 of the 40 report it. The arrangement given is common to 5 of the 10.

Manual Training, Household Science. Manual training and household science courses are not typical offerings of these schools. Only 11 of the 40 report one or both. The arrangement given is the one found in 7 of the 11 schools.

TABLE 50

A MINIMUM CURRICULUM LEADING TO COLLEGE ENTRANCE IN FOUR YEARS, ONTARIO

Subject	No. of Periods per Week Averaging Forty Minutes Each			
	Lower School		Middle School	
	First Year	Second Year	Third Year	Fourth Year
English	5–6	5–6	5–6	5–6
History	4	–	4–5	4–5
Algebra	5–6	–	5–6	–
Geometry	–	5	–	5
Latin	4–5	4–5	4–5	4–5
French	4	4	4	4
Physiography	–	4–5	–	–
Physics	–	–	6	–
Chemistry	–	–	–	6
Physical Education	3	3	2	2
Total Periods per Week.	25–28	25–28	30–34	30–33

NOTE: Periods in physical education are 30 to 40 minutes in length.

If the pupil who is going on to college remains for a fifth year in high school, the Province makes no requirements of him. An Upper School pupil may take such courses as may be approved by the principal.[10] The courses which are taken will be determined by the course for which the pupil desires to receive credit in the first year of the universities or by special requirements; for example, those which the universities make for entrance upon an honours course.

The Normal Entrance Curriculum: A second important curriculum is that prescribed for entrance into the normal schools of the Province. As with the universities, there are two points of entrance into the normal schools, at the end of either the fourth or the fifth year. The four-year high school curriculum is designed for those who are going on to take the Second-Class Teachers Certificate at the end of a year of professional study in the normal schools. The five-year curriculum is for those who will proceed in the normal schools to a First-Class Certificate, which, like the Second-Class Certificate, requires a year's professional training. In addition to the subjects which are obligatory upon all pupils, the pupil who is planning to enter a normal school at the end of four years is required to study the following subjects:[11]

Subjects of the Lower School:
    Arithmetic, grammar, art, geography, and any two of botany, zoölogy, agriculture (first year), agriculture (second year).
Subjects of the Middle School:
    Algebra, geometry, British history, ancient history, and any two of physics, chemistry, agriculture (first year), agriculture (second year).

With these requirements known, as well as the subjects obligatory upon all pupils, and the courses typically offered by the schools, it is possible to give in Table 51 an arrangement of the minimum prescribed courses frequently followed in a four-year curriculum for entrance to the normal schools.

Like the matriculation curriculum, the normal entrance curriculum will occupy a large proportion of a pupil's time, requiring as it does six prepared subjects in his first year, five in his second, and four in each of his third and fourth years. Differing from the matriculation curriculum, the prescriptions are more rigid in the early years. As far as the courses prescribed are concerned, the major difference lies in the absence of foreign languages from the curriculum for normal entrance and the substitution therefor of a year's course in each of geography, art, arithmetic, botany, zoölogy, and formal English grammar.

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[11] *Ibid.*, p. 77.

The five-year curriculum for the pupils who are looking forward to a First-Class Certificate allows somewhat more freedom. In addition to the subjects obligatory upon all pupils, science or agriculture and mathematics are required in each year of the Lower and the Middle Schools. English, history, and mathematics are required in the Upper School together with two additional sub-

TABLE 51

ARRANGEMENT OF THE MINIMUM PRESCRIBED COURSES FREQUENTLY FOLLOWED IN THE FOUR-YEAR CURRICULUM FOR ENTRANCE TO THE NORMAL SCHOOLS, ONTARIO

Subject	No. of Periods per Week Averaging Forty Minutes Each			
	Lower School		Middle School	
	First Year	Second Year	Third Year [3]	Fourth Year [3]
English [1]	5–6	5–6	5–6	5–6
History	4	–	4–5	4–5
Geography	4	–	–	–
Arithmetic	–	4–5	–	–
Algebra	5–6	–	5–6	–
Geometry	–	5	–	5
Physics	–	–	6 [2]	–
Chemistry	–	–	–	6 [2]
Botany	4–5 [2]	–	–	–
Zoölogy	–	4–5 [2]	–	–
Physiography	–	4–5	–	–
Art	4–5	–	–	–
Physical Education	3	3	2	2
Total Periods per Week	29–33	25–29	22–25	22–25

NOTE: Periods in physical education are 30 to 40 minutes in length.

[1] A year's course in formal English grammar is prescribed. It is not clear from the time-tables reported by schools when this course is usually introduced. Pupils are permitted to substitute Latin grammar of the Lower School or Latin composition of the Middle or Upper Schools for grammar. (Department of Education, Courses of Study and Examinations of the High Schools, Collegiate Institutes, and Continuation Schools, Revised, 1924, p. 77.)

[2] An option is allowed in all these cases between the science course and the corresponding course in agriculture of the first, second, third or fourth years. (*Ibid.*, p. 77.) Botany, zoölogy, physics, and chemistry are the subjects usually offered by the schools.

[3] According to this arrangement of studies, the pupil must select at least a fifth prepared subject in each of the third and fourth years to make up the provincial minimum of five subjects.

jects which may be chosen from languages, sciences, and additional mathematics.[12]

The General Curriculum: For those who desire "merely to secure a general education" a general curriculum is outlined at the close of which a graduation diploma is granted. "The candidate for the graduate diploma must pass an examination on twelve papers, selected by the principal as suitable for the candidate and to the organization of his school. The twelve papers must include:

(1) The Lower School paper on Canadian history and civics.
(2) The Middle or Upper School papers on English literature and composition.
(3) The Middle School paper on British history.
(4) At least five other papers on subjects of the Middle or Upper Schools.

"When a subject is selected which is required for admission to the normal schools or to the universities the candidate must take this examination. In other approved subjects there must be a test recognized by the Department."[13]

In addition, the general curriculum will necessarily include a one-year course in physiography and a one-year course in each of algebra and geometry, all three in the Lower School. These subjects, as has already been noted, are obligatory upon all pupils. The prescribed studies in the general curriculum are, therefore, much fewer than in the matriculation and normal entrance curricula, embracing in the first year three subjects, English, Canadian history and civics, and algebra; in the second year three subjects, English, physiography, and geometry; in the third year two subjects, English and British history; and in the fourth year one subject, English. The pupil, however, is not permitted to choose the remainder of his work. The papers which he must pass are "selected by the principal," and the Department has been careful to require that at least five papers in addition to English and British history shall be of fourth or fifth year status. This requirement clearly shows that the Ontario Department of Education regards it as highly important that the major portion of a pupil's work, even within the freedom of a general curriculum, should be done in subjects studied continuously over a period of three or four years.

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[12] Department of Education, Courses of Study and Examinations of the High Schools, Collegiate Institutes, and Continuation Schools, Revised, 1924, pp. 77 and 78.

[13] *Ibid.*, p. 78.

The Commercial Curriculum: A commercial curriculum is outlined in the Ontario programme for high schools and collegiate institutes. Commercial work, however, is now mainly organized under the regulations governing vocational schools and departments.

A Composite High School in Ontario: Secondary vocational courses are now carried on in Ontario mainly under the Vocational Education Act of 1921. These courses may be given either in a separate vocational school or in a separate department of a collegiate institute, high school, or continuation school. Strictly speaking, these vocational courses cannot be called curricula of the regular high school programme; vocational schools and departments are organized under a separate law and separate regulations. For full-time day pupils, however, the vocational courses are in effect differentiated secondary curricula. The pupils must take a core of obligatory subjects similar to that followed by pupils on the collegiate or academic side. In addition they have the special subjects of the various vocational courses. The obligatory core subjects and the special courses are given below.[14]

A. General Education: The following subjects are obligatory in all courses of study:

(1) Physical Training and Hygiene.
(2) English Literature and oral and written composition (including the essentials of Grammar).
(3) History, Civics, and Elementary Economics.
(4) Arithmetic, Geography, and Elementary Physics.

English and Physical Training shall be taken in all the years of the courses.

B. Vocational or Special Training:

Industrial Course:

(1) Drawing (freehand and mechanical) and design.
(2) Mathematics and science related to the needs of industry.
(3) Practical study of the fundamental operations and processes of suitable types of industrial work, such as cabinetmaking, wood-turning, pattern-making, simple building construction, sheet metal work, electric wiring, motor mechanics, printing, foundry work, machine shop practice, etc.

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[14] Department of Education, Recommendations and Regulations for the Establishment, Organization, and Management of Vocational Schools, and Vocational Departments in Continuation Schools, High Schools, and Collegiate Institutes, 1922, pp. 36, 37, and 38.

(4) Study of materials.

Homemaking Course:

(1) Drawing, color, and design applied to home decoration, costume, furnishings, etc.
(2) Science related to the needs of homemaking.
(3) Practical study of the fundamental operations and processes related to homemaking: foods and cooking, sewing, dressmaking and millinery, household management, laundry, home nursing, budgets and accounts, etc.
(4) Study of materials and supplies.
(5) Foreign language (optional).

Art Course:

(1) Drawing, color, illustration, design, clay modeling.
(2) History of art.
(3) Principles of art reproduction (engraving, etching, photographing, textiles, etc.).
(4) Study of materials.
(5) Foreign languages (optional).

Technical Course:

(1) Drawing, mechanical or architectural.
(2) Mathematics and Science needed for
    (*a*) preparation for junior executive or technical positions in trade or industry, or for
    (*b*) admission to engineering colleges.
(3) Practical study of the fundamental operations and processes of suitable types of industrial work, as described under Industrial Course (3), or as a substitute, in whole or in part, courses, approved by the Minister, in technical subjects, such as applied mechanics, building construction, architecture, surveying, electricity, power plant operation, electro-chemistry, metallurgy, and mining, etc.
(4) Foreign languages (optional).

Commercial Course:

(1) Economics.
(2) Mathematics and science, related to the needs of business.
(3) Practical study of the subjects relating to business, typewriting, stenography, bookkeeping, accountancy, business law, office and factory management, advertising, salesmanship, etc.
(4) Drawing and design (optional).
(5) Foreign languages (optional).

Agricultural Course:

(1) Farm accounting, marketing and economics.
(2) Mathematics and science, related to the needs of agriculture.

(3) Practical study of farm crops and soils, animal husbandry, dairying, poultry husbandry, bee-keeping, fruit-growing, vegetable gardening, floriculture, farm buildings and equipment, farm mechanics, etc.
(4) Drawing (freehand and mechanical); (optional).

Table 52 gives the organization of studies in a composite high school which includes both the academic or collegiate side and the vocational side. This time-table is more recent than any of the others used in the present chapter and consequently indicates a development of vocational courses which is more advanced than this and many similar schools could have shown in 1923-24. A pupil in the collegiate department will select from the offerings illustrated those courses which will make up one of the curricula lead-

TABLE 52

TIME-TABLE OF ST. CATHARINES COLLEGIATE INSTITUTE AND VOCATIONAL SCHOOL, ONTARIO, 1927 (1,126 Pupils)

COLLEGIATE DEPARTMENT (602 Pupils)

Subject	No. of Periods per Week in Each Year of the Course				
	I	II	III	IV	V
English	6	9	6	7	7
French	5	5	5	5	6
German	–	3	4	4	5
Latin	5	5	5	5	6
Greek	–	–	5	4	5
Arithmetic	–	5	–	–	–
Algebra	5	–	2	5	5
Geometry	–	5	5	–	4
Trigonometry	–	–	–	–	3
Physics	–	–	–	5	4
Chemistry	–	–	6	4	5
Botany	4	–	–	–	3
Zoölogy	–	4	–	–	3
Geography	4	–	–	–	–
Physiography	–	5	–	–	–
Canadian History	4	–	–	–	–
Ancient History	–	–	–	4	–
Modern History	–	–	–	–	5
Art	4	–	–	–	–
Physical Training	2	2	2	2	2

NOTE: All periods in this time-table are 40 minutes in length.

TABLE 52 (*Continued*)

COMMERCIAL DEPARTMENT (301 Pupils)

Subject	No. of Periods per Week in Each Year of the Course			
	I	II	III	Special
English	6	6	6	7
French	4	4	4	–
Penmanship and Spelling	4	3	2	3
Bookkeeping	5	4	4	5
Typewriting	3	5	5	5
Arithmetic	3	3	–	–
Stenography	4	4	4	5
Rapid Calculation	1	1	–	2
Commercial Law	–	2	2	2
Economics	–	–	3	3
Office Practice	–	–	2	2
Salesmanship	–	–	3	2
Geography	–	3	–	–
Canadian History	3	–	–	–
Physiography	4	–	–	–
British History	–	3	–	–
Commercial History	–	–	3	–
Manual Training	–	2	–	–
Household Service	–	2	4	–
Physical Training	2	2	2	2

TECHNICAL DEPARTMENT (223 Pupils)

Subject	No. of Periods per Week in Each Year of the Course		
	I	II	III
Boys			
English	5	5	5
History	3	3	3
Geography	3	3	3
Science	4	4	4
Mathematics	5	5	5
Electricity	4	4	4
Woodwork	4	8	8
Machine Shop	4	8	8
Drafting	4	6	6
Physical Training	2	2	2

TABLE 52 (*Continued*)

TECHNICAL DEPARTMENT (223 Pupils)

Subject	No. of Periods per Week in Each Year of the Course		
	I	II	III
Girls			
English	5	4	4
History	3	3	–
Sewing	6	8	7
Cooking	6	4	4
Art	4	4	4
Mathematics	4	3	–
Geography	2	–	–
Science	3	3	6
Home Nursing	2	2	1
Millinery	3	5	6
Household Science	–	2	–
Dietetics	–	–	2
History of Costume	–	–	2
Physics	–	–	1
Physical Training	2	2	2

ing to normal entrance, university matriculation, or a graduation diploma which have been described earlier in this chapter. Pupils in the commercial or technical departments will select courses which make up curricula along the lines laid down in the extended quotation from the regulations of the Department of Education concerning vocational schools and departments which has just been given.

Alberta

The Province of Alberta is entering upon a period of transition from the single-track curriculum plan to the plan of multiple curricula with an obligatory core. The provincial programme indicates the proposed changes very clearly. When the schools replied to the questionnaire, the new plan was just beginning to take effect. Consequently, it was not possible to illustrate the full scope of the changes in the time-table of any school. Indeed, it is probable that many years will elapse before the differentiation contemplated by the Department of Education will become widely operative. The school chosen for illustration is a rather small one which shows the present possibilities in the Province of Alberta better than it shows the projected plans of the Department.

At the time covered by the present study the schools were operating largely under the old regulations. Examinations for provincial diplomas held at the close of grades X, XI, and XII governed the subjects offered by the schools and the progress of the pupils. The provincial examinations were set upon certain required subjects and upon certain designated options. To be eligible for admission to the examination for the grade XI or grade XII diplomas, it was necessary for the candidate to hold the diploma of the next lower grade. Departmental examinations were not provided at the close of grade IX. Promotion of pupils was made by grade and not by individual subjects.

At the date when schools replied to the questionnaire important changes in the high school regulations were just beginning to come into operation. These new regulations[15] are now in full force and may be briefly summarized as follows:

1. Instead of a single-track curriculum with designated options, there are now outlined five curricula: normal entrance, university matriculation, agricultural, technical, and general.
2. The number of subjects to be taken concurrently has been reduced.
3. Promotion is made by subject and not by grade.
4. Provincial examinations are held for all subjects in every grade.
6. Diplomas are granted at the close of the high school course, not at the close of each year.
7. Local authorities have been granted some freedom in regard to the programme of studies; for example, they may suggest optional courses of local interest.

An Alberta High School Time-Table.—The situation in Alberta, illustrated in Table 53, therefore, is interesting for several reasons. The provincial programme had been revised and was in process of being introduced when the schools replied to the questionnaire. The new programme had been introduced into grade IX, but the old programme was still in force in grades X, XI, and XII. In addition to making possible greater differentiation, one of the main motives in revising the curriculum was to reduce the number of subjects undertaken concurrently, and it will be observed from the school time-table illustrated in Table 53 that there is a noticeable difference between the new grade IX and the old grade X in this respect, five subjects being required in grade IX as against nine in grade X. It is interesting also to observe that the schools of the province react at once to a new programme issued by the central authority. A third point is that the position of foreign languages is not so secure as it is in the other provinces. From the comparisons with other schools which accompany the time-table it may be seen that there is more variation in the length and variety of for-

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[15] See (1) Handbook for Secondary Schools, Alberta, 1925; (2) Regulations of the Department of Education relating to Programmes of Studies and Annual Examinations for Secondary Schools, 1926; (3) Seventeenth Annual Report of the Department of Education of the Province of Alberta, 1922, pp. 24, 25, 26, and 27.

TABLE 53

TIME-TABLE OF AN ALBERTA HIGH SCHOOL ENROLLING ONE HUNDRED FORTY-FOUR PUPILS, 1923-24

Subject	No. of Periods per Week in Each Year			
	Grade IX	Grade X	Grade XI	Grade XII
English	8	10	7	9
French	A8	A3	B5	D4
Latin	–	A3	B5	D4
Arithmetic	–	–	3	–
Algebra	6	4	C3	D4
Geometry	5	4	C3	D4
Trigonometry	–	–	–	4
General Science	7	–	–	–
Physics	–	3	B3	–
Chemistry	–	–	4	E5
Botany	–	2	–	–
Zoölogy	–	2	–	–
Agriculture	–	–	C3	–
Geography	–	4	–	–
History	5	4	4	4
Art	–	3	–	–
Prescribed Periods per Week	31	36	30 or 32	30

NOTE: Periods are 33 minutes in length.

EXPLANATIONS OF TABLE 53

The Explanations are based on Regulations of the Department of Education relating to Courses of Studies and Annual Examinations for Grades IX, X, XI, and XII for the year ending June 30, 1924.

A. Foreign languages are not required in grades IX and X. There is no option allowed between foreign languages and other subjects. If the pupil wishes to study them he must carry them in addition to the prescribed work.

B. Pupils may choose one. Presumably the choice of a language is not permitted to pupils who have not already been studying it. The regulations, however, do not so state.

C. A choice is given of any three of algebra, geometry, agriculture, music, household economics, manual arts. In this case the school has made its selection of three subjects.

D. Any two of algebra, geometry, Latin, French, or German are allowed. This school does not offer German.

E. Either physics or chemistry may be taken. This school offers chemistry in this year.

Comparison with Thirteen Other Schools

(Only ten schools gave complete reports. The comparisons which follow refer to the first three years only. The subjects offered in the fourth year, when a school is equipped to carry it, may be seen in the explanations of the table already given.)

Length of Period. The length of period varies, but 9 out of 13 schools reporting have less than a 40-minute period.

English. More time is given to English than to any other subject—nearly twice as much in some schools.

Foreign Languages. The situation varies considerably. Only one of the schools reporting offers a foreign language other than French and Latin, in this case a single year of German. Seven of the 13 schools offer both French and Latin. Of the remaining 6, 2 small schools offer neither; 3 offer French only; 1 Latin only. Of the 7 which offer both French and Latin, 2 have them through 3 years; 5 have the arrangement illustrated, beginning either Latin or French in the first year and the other language in the second.

Mathematics. The sequence illustrated is the one regularly found in the schools reporting.

Science. The arrangement illustrated is typical. Eight of 11 schools have it thus. The other 3 omit one or other of chemistry, botany, or zoölogy. All have physics.

History and Geography. This is the regular arrangement. Two schools do not report history in the first year and two do not report geography at all.

Agriculture. Two of 11 schools do not report it. The other 9 have it in the third year as illustrated.

Art. This is the regular place for it. Three of 11 schools have it otherwise, two omitting it, and one having it through three years.

eign language courses than in any other of the regular subjects. Only seven of the thirteen schools which sent their time-tables have both French and Latin. Only two of these give a three-year course in both before the first point of entry into the university and the normal schools. The other five give three years to one language and two to the other, beginning either Latin or French in the first year and the second language in the second. As may readily be reckoned from the time-table and the explanations appended to it, a pupil would be required to carry five subjects in his first year, nine in his second, eight in his third, and six in his fourth year if he remains in high school. Under the new organization a pupil will have in his first year five or six subjects, in his second six, in his third six or seven, and in his fourth year seven or eight, the variation depending on the curriculum chosen.

The Protestant System of Quebec

Time-Table of a Protestant High School.—The high school course in the Protestant system of Quebec illustrates the single-track curriculum with designated options. In the time-table illustrated in Table 54, all the pupils follow the same curriculum in the first two years, which, with the exception of algebra in grade VIII, falls within the limits prescribed by the programme of the Protestant Committee (see explanations). The options provided by the school in grades X and XI are governed mainly by the requirements for entrance to McGill University.[16] A pupil intending to go into Arts will continue his Latin, taking the language option under A, and will choose a science from B. A pupil who intends to enter the Faculty of Applied Science will drop Latin in grade X, his French being adequate to fulfill his language requirement, and will take the advanced mathematics option which is required. He will also choose a science from B.

While the provincial programme prescribes a compulsory minimum of six subjects in each year, it may readily be calculated that a pupil in the school chosen for illustration will have (without physical education and not considering advanced algebra and geometry additional subjects) eight subjects in each year.

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[16] For these requirements see Calendar of McGill University, 1923-24, pp. 53 ff.

TABLE 54

TIME-TABLE OF OUTREMONT HIGH SCHOOL, MONTREAL: A SCHOOL OF THE PROTESTANT SYSTEM OF QUEBEC ENROLLING THREE HUNDRED FIVE HIGH SCHOOL PUPILS, 1923-24

Subject	No. of Periods per Week in Each Year			
	VIII	IX	X	XI
English	12	9	8	6
French	6	5	7	7
Latin	6	6	A6	A8
Arithmetic	5	5	–	–
Algebra	3	5	5	5
Geometry	–	4	5	5
Trigonometry	–	–	A4	A2
Algebra and Geometry (advanced)	–	–	A2	A6
Physics	–	–	B4	B4
Chemistry	–	–	4	4
Geography Physiography	4	4	B4	B4
Agriculture	3	–	–	–
History	4	4	4	4
Physical Education	2	2	2	2
Total Periods per Week	45	44	45	45

NOTE: Periods are 30 minutes in length except in arithmetic, grades VIII and IX; in algebra, grades VIII, IX, X, and XI; in geometry, grades X and XI, where they are 40 minutes; and in agriculture where they are 50 minutes.

EXPLANATIONS OF TABLE 54

Comparison with Other Schools

A second large high school in Westmount enrolling 621 pupils makes additional provision for 4 years of art, 2 years of commercial work, and a year of manual training. This school has, in addition, these differences from the time-table illustrated: Latin is dropped in the fourth year; no special periods are set aside for advanced algebra and geometry; a single period of chemistry is found in grade IX; trigonometry is given only in grade XI.

A third smaller school has the same time-table as Outremont High School with these exceptions: Geometry appears in grade VIII; no separate periods are reported for advanced algebra and geometry; and general science is reported in grades IX and X. Further explanations of Table 54 are given on page 214.

EXPLANATIONS OF TABLE 54 (*Continued*)

A. An option is allowed between Latin and advanced mathematics (trigonometry and advanced algebra and geometry).

B. An option is allowed between physical geography and physics.

PROGRAMME OF THE PROTESTANT COMMITTEE FOR GRADES VIII TO XI *

Grade VIII	Grade IX	Grade X	Grade XI
Compulsory: English History Geography French Arithmetic Agriculture	Compulsory: English History Arithmetic French Geography Algebra or Geometry	Compulsory: English Algebra or Geometry Geography or Physics or Chemistry or Botany French History Another subject	Head teachers are advised to consult requirements for entrance to universities.
Optional: Latin	Optional: Latin Geometry or Algebra Drawing	Optional: Latin Drawing	

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* Memoranda of Instructions for Teachers, Protestant Intermediate Schools and High Schools of the Province of Quebec, 1923, p. 5. The table as presented here is abbreviated in several places.

In grade XI, while complying with the requirements for entrance to college, a pupil should take at least six subjects, one under each of the following heads: English, mathematics, science, language and history. (Memoranda, p. 3.)

In grade X a maximum for any pupil of ten subjects is prescribed (Memoranda, p. 3). No maxima are prescribed for grades VIII and IX, presumably for the reason that since there are fewer than ten subjects altogether there is no objection to a pupil taking them all. The number of subjects attempted in grade XI will presumably be sufficiently restricted by the ability to pass the examinations for entrance to college.

In comparing the time-table of the school with the provincial programme, it will be seen that the school has varied from the provincial programme in these ways mainly: (1) Mathematics receives increased time, algebra having been imported into grade VIII and trigonometry into grade X. (2) Pupils are required to take a larger number of subjects than those which are made compulsory by the province. (3) The optional subjects, drawing and botany, are not offered.

Extent of Differentiation

There is undoubtedly a growing tendency to make the curriculum more flexible by making it more responsive to the varying needs of the increasing high school population. The most important evidence of this trend is the introduction of vocational curricula on the secondary level in some of the larger cities of the Dominion, and in the vocational schools of Ontario in particular. The traditional curricula which provided almost exclusively for the prospective teacher or the prospective college student, while they still control to a large measure the subjects offered by the schools, are being supplemented in provincial programmes, if not widely in school time-tables, by technical, commercial, general, and, occasionally, agricultural curricula.[17] While the necessity for differentiated curricula is becoming more and more widely accepted, it must not be supposed that the high schools generally have been able to put the theory into practice. The authors of the British Columbia Survey found that the differentiation contemplated by the provincial programme had but little practical application:[18]

> When we come to examine the secondary schools of British Columbia [they reported] we think we easily discover why they are not wholly popular. The truth is they have a narrow rigid curriculum—not necessarily rigid in intent or theory but in its practical outcome. Outside a few large centers where type of school, number of teachers, and number of students make some differentiation of courses possible, their schools are meeting the genuine or fancied needs of at most only two classes of students—those who expect to enter a university and those who wish to teach. In the natural order of things these two classes put together form an insignificant proportion of the total number of students in high schools.

If an adequate degree of differentiation throughout the high schools generally is to become a fact rather than a theory of limited application, not only must the needs of the pupils be recognized in provincial programmes by providing for a variety of curricula, but efforts must also be made to fit the organization and administration of the schools to the new demands through the enlargement of the areas of administration and support, through the lengthening of the period of secondary education, and through the provision of an intermediate school unit which among other functions will help the pupil to find the curriculum best suited to his needs.

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[17] Compare, for example, the Regulations of the Department of Education of Alberta relating to high schools for the years 1924 and 1926.

[18] Province of British Columbia, Survey of the School System, p. 112.

SUMMARY

In the present chapter an investigation of the comparative importance of the principal high school subjects revealed that mathematics is the outstanding subject of study in Canadian high schools; that foreign languages come second, a little higher than English which takes third place; and that natural science and the social studies fall much below either of these. Reference was made also to the low position held by the æsthetic and the practical subjects. The ranking of subjects thus disclosed was criticized as one which would accord well with a formal discipline theory of studies and a belief that the secondary school should be selective in character. Criteria for the evaluation of studies which seemed to be more in harmony with modern psychological theory and the democratic trend in Canadian secondary education were suggested.

An examination of provincial programmes and school timetables disclosed a condition which would explain in part the existing emphasis. Differentiation of curricula at the secondary level which would broaden the scope of high school education was found to have made a real beginning in Ontario. Elsewhere, while it was coming to be recognized as an important objective, differentiation existed rather in progressive provincial programmes than in school time-tables. The majority of schools, because of the prestige of the college entrance requirements and because of the restrictions imposed by their small size and the short secondary period, still adhere to a rather narrow and formal course of studies. Nevertheless, it is apparent that the democratization of the secondary curriculum has begun.

CHAPTER XII

SUMMARY AND CONCLUSIONS

Evidence for the Important Characteristics of Canadian Secondary Education Summarized

It is important to consider at this point whether the theses regarding Canadian secondary education which were posited in the introductory chapter have been justified by the detailed treatment given in the preceding pages.

1. *Centralized control of provincial systems of education.* Undoubtedly the control of secondary education in the various provinces may be so characterized. At the head of each system there is a department of education which includes officials with long periods of service. To these departments has been granted by law the control of the public schools, a control which is exerted under the provisions of the law itself and through comprehensive regulatory powers delegated to the departments by provincial legislatures. Grants from the provincial treasury are contingent upon the law and the regulations of the department being obeyed. A comprehensive system of inspection and report has been organized which is designed to make certain that local authorities are reasonably living up to the law and the regulations. What is to be learned in the high schools is controlled by centrally authorized textbooks and programmes of study, and this control is further enforced by provincial examinations which are held at the beginning and the end of the high school course and to varying degrees within the high school itself depending upon the policy of the province concerned. A striking example of the certainty with which this system of control operates has been witnessed in the case of Alberta where the introduction of a new programme of studies embodying important changes was immediately reflected in the time-tables of individual schools. Provincial examinations are, moreover, the regular means of securing entrance to the universities and to the provincial normal schools. A multiplicity of examinations within a province is thus avoided, but the control of the central authorities is undoubt-

edly further strengthened thereby. Again, the central authorities are the sole sources of licenses to teach, and in some of the provinces they have the training schools for the professional preparation of high school teachers under their direct management. Quotations from the courses given in the Ontario College of Education bear witness to the fact that teachers are being trained to teach a body of subject matter which is regarded as fixed. Thus the subject matter of the schools is often controlled at its origin in the training of the prospective teacher as well as at its outcome by examination of pupils.

On the other hand, there are the local authorities managing the school or schools of their own districts, which are frequently so small that they support no more than a one- or two-room school. The local authorities manage their schools under specific directions from the central authorities as to their duties and powers, a condition which argues that no further acquaintance with educational policies is expected in local areas than may be found in the layman elected to a school board, and that little further initiative is required than that involved in following directions intelligently. The high school principal, the local officer to whom particular attention was given in this study, was found to be mainly occupied in teaching; his duties in so far as they were investigated were found to be rather narrow and specific, and appointment to a more responsible post appeared to rest upon length of service in the system rather than upon special training.

What has been said does not mean that there are no contrary tendencies. A general characterization is naturally subject to qualification particularly where nine legally independent provincial systems are under consideration. In the first place, a tendency to reduce the extent of provincial examinations has been pointed to, a reduction which affects the well-equipped town or city school more than it does the small rural school. In the second place recent revisions of provincial programmes of study have expressly stated that greater responsibility for local authorities was intended which would permit to them the suggestion of optional subjects of local interest and which, in view of the beginnings of differentiation at the secondary level, would necessitate their making a choice from the curricula set up. In the third place the control of the training of high school teachers has been relaxed as it is transferred from the normal schools to the universities. Finally, the newly established vocational schools have so far escaped the examination-incubus.

2. *The Secondary School System Is Developing Under Pioneer Conditions of Life.* Substantially this statement is well founded. There are, of course, cities spaced at intervals across the Dominion in which large secondary institutions are to be found. There are, too, differences between provinces in the extent to which pioneering conditions prevail. At the same time one of the outstanding problems of the country is that of providing adequate opportunities for secondary education for pupils in rural areas. In the Dominion as a whole at least one-third, and in the Dominion excluding the Province of Ontario at least one-half, of all high school pupils are receiving their training in graded or ungraded elementary schools either in separate classrooms or in classrooms along with elementary school pupils. The secondary education which these rural pupils receive is too frequently obtained at the hands of teachers with inferior preparation; adequate equipment is frequently lacking, and the curriculum tends to be narrow and formal. Not only is the secondary education of the country child inferior in quality but it is often difficult to secure near home. A multiplicity of small school districts in rural areas each with its little school and its own school board represents the administrative side of the situation. Voluntary unions between adjacent districts have so far afforded the chief corrective for the disabilities imposed by the district system, and there is good evidence that the educational conditions which exist under consolidation are better than those which are found in the one-room school.

Related perhaps to pioneer conditions of life, a sign at any rate of an undeveloped secondary school, is the three-year high school course which prevails outside of Ontario. In this brief secondary period pupils attempt under considerable pressure and with many failures to assimilate enough of the major fields of learning to enter college or a provincial normal school. Between the eight-year elementary school and the college the secondary school is crowded. Receiving an ever-increasing number of pupils from the elementary school and obliged to meet the stiff requirements of college entrance, it gives evidence, through failure and elimination, of a maladjustment to its task.

These conditions must be considered in connection with the previous thesis. The weakness of the local secondary school under these conditions invites the strong hand of the central authorities in order to maintain high standards under difficult conditions. Prescribed textbooks and province-wide examinations do make recognizable standards of achievement possible even to pupils in the smallest and most meagerly equipped schools. Undoubtedly it is thus possible for the able boy or girl in a remote district to secure a high school education, and during the process it is quite possible that he may gain enviable habits of independence. At the same time the process tends to be rigorously selective; and whatever may be said for it as a method of discovering ability, there can be no doubt that it entails an unfortunate amount of waste of the less distinguished talent from which, after all, the great body of citizens must be recruited. The situation would be less unsatisfactory if a high school education were needed only by the few, but it is becoming more and more apparent in Canada as elsewhere that effective citizenship in a democratic society, or from the individual point of view a well-rounded life, is not to be attained from an elementary school education alone. Disabilities imposed by pioneer conditions are thus out of harmony with the growing conviction of a considerable body of public opinion the strength of which may be seen from the section which follows.

3. *Secondary Education Is in Process of Democratization.* This is a most significant aspect of the present development of the Canadian secondary school. Canada thus finds its place in a movement of wide extent both in Europe and in America which looks toward the extension of educational opportunities beyond the elementary school to a wider selection of youth. In the degree to which this extension has taken place, Canada now stands between the United States and the Old World. Canada in 1923 had in its public high schools one pupil for every sixty of the total population. Excluding the Province of Quebec from the calculation makes the ratio one to fifty-one. The United States in the year 1922 showed a ratio between the same populations of one to thirty-eight, being thus further advanced than Canada by a marked difference. A comparison

between Canada and the countries of Europe based upon the best secondary evidence available indicates that Canada stands in respect to the relation of the adolescent population to the numbers in high school considerably in advance of its nearest European competitor. Considering the pioneer conditions under which the Canadian system is developing, this must be regarded as no mean achievement.

The development in Canada of a democratic secondary school is now at a most interesting and difficult stage. About fifty years ago the elementary and secondary schools were combined by the superposition of the secondary upon the elementary grades into a continuous system. Fees for high school pupils have been generally abolished. Thus the basis for a democratic system of free public schools has been laid, extending from the first grade to the university.

It is not, therefore, surprising that a rapidly growing number of pupils should seek the opportunities open to them. Between 1891 and 1923 the high school population increased by 234 per cent as against an 82 per cent increase in the total population of the country and a 94 per cent increase in the elementary school population. The year 1916 appears to mark the beginning of the sharp increase. Are the high schools ready to receive this influx? This is the crux of the present situation. The evidence indicates that they are not. In the main the high schools are prepared to care for the prospective college student and the prospective elementary school teacher, and the weight of high school studies is predominantly linguistic and mathematical. The signs of the maladjustment of the school to the needs of its pupils are to be found in large percentages of failure and in a disturbing amount of elimination from grade to grade. Steps are indeed being taken to meet the situation. Vocational schools and curricula under the stimulus of federal grants are beginning to appear, and in Ontario they are well advanced. Progressive provincial programmes of study show a desire to promote differentiated curricula, but this desire is largely defeated by the effects of pioneer conditions already referred to, and possibly also by the lack of local educational leadership. The most important sign of the democratic trend is the Adolescent Attendance Act passed by Ontario in 1919 and since then gradually brought into operation. Under this Act all young people must attend school either full or part time up to eighteen years of age or to the completion of the Middle School. Even though differentiation at the secondary level has clearly begun, this crucial problem in the country at large still remains to be solved.

As differentiation goes forward, new problems in the articulation of elementary and secondary education appear. It is no longer merely a question of securing continuity in subject matter along a single-track curriculum nor of reducing the number of pupils who fail of promotion at the close of the elementary school. The problem of a more complex type of articulation must be faced, involving continuity in differentiation. It is not a problem which can be solved at a single point; it must be solved gradually during a period of years when the pupil is, let us say, between 12 and 15 years of age, by a process of ''broadening and finding,'' looking toward the kind of differentiation which is in harmony with the pupil's interest and capacity.

4. *Is There in Fact a Canadian Secondary School?* This question, raised first in the Introduction, has been left to the close of the summary, and it need not now be argued at length. All that has hitherto been said makes an affirmative reply inevitable. It must, however, be pointed out that the Roman Catholic system of Quebec stands apart. Only with the greatest difficulty can it be included under any unified survey of Canadian education, and then mainly to create exceptions to the general practices elsewhere. It would indeed be a debatable question whether public secondary education exists there at all. Furthermore, it is clear that Ontario stands in advance of the rest of the country in the degree to which its secondary system has been developed. The problems and organization of secondary education in Ontario are not fundamentally different; they are, however, at a more advanced stage. It would also be possible to find distinction between the Maritime Provinces and the West, characteristic, no doubt, but less important than the similarities. Looking at the Dominion as a whole it is possible to see a system of secondary schools being built up under public control and amidst pioneer conditions of life, and in spite of manifold difficulties, striving to bring the democratic ideal nearer to fulfillment. The common problems involved in this nation-wide effort

are more fundamental than differences in the details of provincial administration.

SOME CONCLUDING PRINCIPLES

It is not the province of this study to make detailed recommendations. If such a task were to be attempted, it would mean a more exhaustive treatment of special problems than has been attempted, and it would mean that the conditions which affect the administration of schools in particular provinces would necessarily be more closely studied. However, since this study has been in part critical as well as descriptive, and since the facts presented in the preceding pages have, in many cases, seemed to the writer to point to desirable lines of advance, there appears to be good reason for summarizing here logically and briefly without further argument the conclusions to which the evidence points and to which the writer's own convictions have brought him. Whether or not these conclusions will be justified depends upon the work of subsequent investigators and upon the results of experience.

1. *There should be a general recognition that secondary education for all either full or part time is the desirable goal.*

The social basis for this principle has not been presented; it represents a point of view from which the writer has treated the foregoing study. This principle is not only recognized but is also being put into effect in the Province of Ontario. It represents a growing conviction throughout the country generally, as is evidenced by the rapidity with which the high school enrollment is increasing.

2. *Secondary education should be regarded broadly as education for the needs of youth rather than narrowly and exclusively as education in the tradition of learning.*

If the first principle is accepted the second follows. That such a statement needs to be made may be observed most clearly in the analysis made in Chapter XI of the relative emphasis placed upon the various subjects of the curriculum. The broadening of the scope of secondary education which has already begun may be observed in the treatment of vocational schools in Chapter IV.

3. *A program of secondary education for all involves extensive differentiation put into operation through multiple curricula with*

a common core and through the organization of part-time schooling in which useful work and school study are coördinated.

No attempt has been made to argue any of the following questions: the underlying reasons for extensive differentiation; the proper organization of curricula; the subjects to be included in a common core; the relative merits of composite high schools and special schools for special purposes; the place and organization of part-time schooling. Multiple curricula with a common core are appearing in progressive provincial programmes and to an extent in the organization of individual schools. The extent to which this change is occurring may be seen in Chapter XI and Appendix D.

4. *There should be a period in the public school system preceding any considerable differentiation extending from approximately age 12 to age 15 during which, through experience with subjects of convincing value wider than he now receives, the pupil may enlarge his interests and discover his bent.*

The differentiation contemplated by the third principle involves a period of guidance preceding it. The importance of such an improvement in the articulation between the elementary and secondary grades has been pointed out in Chapter VI. This principle also points to a reform which will have the effect of lengthening the secondary period and for which the need has been pointed out in Chapters VII and VIII.

5. *There should be an examination and if necessary a reorganization of the materials of secondary education.*

Curricula cannot be built up intelligently out of materials of vague or unknown educational value. One cannot say *how much* English until he knows *what* English. The content of subjects as now taught in Canada has not been investigated in this study. The striking preponderance of mathematics in several provinces, shown in Chapter XI, points forcibly to the need of the present principle.

6. *There should be an increase in the size of local units of administration and support in rural areas.*

If the differentiation envisaged in previous principles is to be brought within the reach of rural pupils in high schools under local management, this principle appears necessary. Evidence supporting this point will be found in Chapters IV and VIII. This principle is closely connected with the next following, for decentralization involves a strong local unit. The possibility of centrally controlled residential schools has not been discussed.

7. *There should be increasing decentralization of control looking to variety and initiative in local educational endeavors rather than uniformity and conformity.*

The force of central control has been shown in Chapter III. The advantages of decentralization have not been argued. The difficulty of securing decentralization under pioneer conditions has been emphasized rather than minimized throughout the study.

8. *There should be increasing emphasis upon the special training of those who are to carry the increased responsibilities of local educational leadership.*

This principle follows directly upon the one next preceding and indirectly upon those which have pointed to the more complex type of education which is involved in a programme of secondary education for all. This problem has been dealt with in Chapter X on the high school principal and also, indirectly, in Chapter IX on the training of high school teachers.

9. *There should be a greater recognition on the part of provincial authorities and others of the common educational problems which the country is facing.*

That there are such problems this whole study has attempted to show. The legal basis of provincial independence has been explained in Chapter II. No attempt has been made to suggest whether the greater recognition referred to by the principle should come through voluntary coöperation between departments of education, through increased federal assistance, through a professional school of education with a national outlook, through associations of the members of the profession of education, or through other means.

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QUEBEC (Protestant):

Memoranda of Instructions for Teachers, Protestant Intermediate (Model) Schools and High Schools (Academies) of the Province of Quebec, Department of Public Instruction, 1923.

The same for 1925.

Supplement to the 1925 edition of the Memoranda, 1926.

QUEBEC (Roman Catholic):

School Regulations of the Catholic Committee of the Council of Public Instruction of the Province of Quebec (Revised in 1915, and amended to January 1, 1923), Translation. Quebec, 1922.

New Brunswick:

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Nova Scotia:

Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction of Nova Scotia. Halifax, 1921.

Prince Edward Island:

Table of Studies in the Public Schools, 1923.

V. Provincial School Regulations

These are bulletins of the several Departments of Education which contain school regulations other than those bulletins already listed under School Laws and Provincial Programmes of Studies.

Alberta:

Regulations of the Department of Education governing the Public School Leaving Examination, 1924.

Saskatchewan:

Regulations of the Department of Education. Regina, 1923.

Manitoba:

Department of Education, Regulations for Secondary Schools, Effective July 1, 1925.

Ontario:

Department of Education, General Regulations, Public and Separate Schools, 1924.

Department of Education, Regulations of the High Schools and Collegiate Institutes, 1922. Toronto, 1922.

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Quebec:

School Regulations of the Province of Quebec, Revised by the Protestant Committee of the Council of Public Instruction. Quebec, 1921.

Nova Scotia:

Journal of Education, being the semiannual supplement to the report of the Superintendent of Education for Nova Scotia.

VI. Miscellaneous Bulletins

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Ontario, Department of Education, Staffs of Collegiate Institutes, High Schools, Continuation Schools, Industrial, Technical, Art and Other Vocational Schools, Normal-Model Schools, and English-French Model Schools, November, 1923. Toronto, 1923.

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VII. SPECIAL REPORTS AND DOCUMENTS ON CANADIAN EDUCATION

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Interim Report of the Committee on High School Education. Toronto, 1921.

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The Bill to Establish Township Boards of Trustees for Rural Schools: A letter from the Hon. G. H. Ferguson, Minister of Education, to those interested in Rural Education. Toronto, 1925.

VIII. PUBLICATIONS OF THE DIRECTOR OF TECHNICAL EDUCATION (DOMINION)

The general progress of secondary vocational education throughout the Dominion may be followed through the annual reports of the Director of Technical Education (Dominion). The Sixth and Seventh Reports have been used more than the others in the present study and the Seventh Report is here listed for example.

Seventh Report of the Technical Education Branch of the Department of Labour, Canada, on the operation of the Technical Education Act assented to July 7, 1919, for the Fiscal Year ending March 31, 1926 (School Year ending June 30), (Reprinted from the Annual Report of the Department of Labour for the same Period). Ottawa, 1927.

The Director of Technical Education has also issued a series of bulletins dealing with various phases of vocational education. Bulletin No. 12, referred to in the text, is here listed.

Department of Labour, Canada, Bulletin No. 12, Special Bulletin, Proceedings of the Interprovincial Conference on Vocational Education at Calgary, April 17-18, 1925. Ottawa, 1925.

IX. BOOKS ON EDUCATION IN CANADA

BELL, WALTER H. The Development of the Ontario High School. University of Toronto, 1918.

MILLER, JAMES COLLINS. Rural Schools in Canada, Their Organization, Administration, and Supervision. Contributions to Education, No. 61. Teachers College, Columbia University, 1913.

RICHARDSON, W. L. The Administration of Schools in the Cities of the Dominion of Canada. J. M. Dent and Sons, Toronto, 1922.

SANDIFORD, PETER (Editor). Comparative Education. J. M. Dent and Sons, Ltd., London and Toronto; E. P. Dutton and Co., New York, 1928.

SHORTT, A. AND DOUGHTY, A. G. (Editors). Canada and Its Provinces. 22 vols. and index. Glasgow, Brook and Co., Toronto, 1914.

SPENCE, RUTH ELIZABETH. Education as Growth; Its Significance for the Schools of Ontario. Toronto, 1925.

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BRIGGS, THOMAS H. The Junior High School. Houghton Mifflin Co., 1920.

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THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING. The Professional Preparation of Teachers for American Public Schools, Bulletin No. 14. New York, 1920.

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Philadelphia School Survey, 1921, 4 vols. Public Education and Child Labor Association of Pennsylvania, 1720 Chestnut Street, Philadelphia.

REISNER, EDWARD H. Nationalism and Education Since 1789. Macmillan Co., 1922.

SLEIGHT, W. G. The Organization and Curricula of Schools. Second Impression. Edward Arnold and Co., London, 1922.

STRAYER, GEORGE DRAYTON. Age and Grade Census of Schools and Colleges. United States Bureau of Education, Bulletin, 1911, No. 5.

SYMONDS, PERCIVAL M. Measurement in Secondary Education, Macmillan Co., 1927.

THORNDIKE, EDWARD L. ET AL. The Psychology of Algebra. Macmillan Co., 1923.

APPENDIX A

CONSTITUTIONAL PROVISIONS FOR EDUCATION IN CANADA *

British North America Act, 1867.

Section VI, Distribution of Legislative Powers
Subsection 93, Education

In and for each Province the Legislature may exclusively make Laws in relation to Education, subject and according to the following provisions:

(1) Nothing in any such Law shall prejudicially affect any Right or Privilege with respect to Denominational Schools which any Class of Persons may have by Law in the Province at the Union:

(2) All the Powers, Privileges, and Duties at the Union by Law conferred and imposed in Upper Canada on the Separate Schools and School Trustees of the Queen's Roman Catholic Subjects shall be and the same are hereby extended to the Dissentient Schools of the Queen's Protestant and Roman Catholic Subjects in Quebec:

(3) Where in any Province a System of Separate or Dissentient Schools exists by Law at the Union or is thereafter established by the Legislature of the Province, an Appeal shall lie to the Governor General in Council from any Act or Decision of any Provincial Authority affecting any Right or Privilege of the Protestant or Roman Catholic Minority of the Queen's Subjects in relation to Education:

(4) In case any such Provincial Law as from Time to Time seems to the Governor General in Council requisite for the due Execution of the Provisions of this Section is not made, or in case any Decision of the Governor General in Council on any Appeal under this Section is not duly executed by the proper Provincial Authority in that Behalf, then and in every such Case, and as far only as the Circumstances of each Case require, the Parliament of Canada may make remedial Laws for the due Execution of the Provisions of this Section and of any Decision of the Governor General in Council under this Section.

The Alberta Act, 1905

Section 17

Section 93 of The British North America Act, 1867, shall apply to the said province, with the substitution for paragraph (1) of the said section 93, of the following paragraph:

(1) "Nothing in any such law shall prejudicially affect any right or privilege with respect to separate schools which any class of persons have at the

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* Quoted from British North America Acts, 1867-1907, Ottawa, 1913.

date of the passing of this Act, under the terms of chapters 29 and 30 of the Ordinances of the Northwest Territories, passed in the year 1901, or with respect to religious instruction in any public or separate school as provided for in the said ordinances.''

(2) In the appropriation by the Legislature or distribution by the Government of the provinces of any moneys for the support of schools organized and carried on in accordance with the said chapter 29 or any Act passed in amendment thereof, or in substitution therefor, there shall be no discrimination against schools of any class described in the said chapter 29.

(3) Where the expression ''by law'' is employed in paragraph 3 of the said section 93, it shall be held to mean the law as set out in the said chapters 29 and 30, and where the expression ''at the Union'' is employed, in the said paragraph 3, it shall be held to mean the date at which this Act comes into force.

THE SASKATCHEWAN ACT, 1905

Section 17 of this act is identical with the above-quoted section of the Alberta Act.

THE MANITOBA ACT, 1870

Section 22

In and for the Province, the said Legislature may exclusively make Laws in relation to Education, subject and according to the following provisions:

(1) Nothing in any such Law shall prejudicially affect any right or privilege with respect to Denominational Schools which any class of persons have by Law or practice in the Province at the Union:

(2) An appeal shall lie to the Governor General in Council from any Act or decision of the Legislature of the Province, or of any Provincial Authority, affecting any right or privilege of the Protestant or Roman Catholic minority of the Queen's subjects in relation to Education:

(3) In case any such Provincial Law, as from time to time seems to the Governor General in Council requisite for the due execution of the provisions of this section, is not made, or in case any decision of the Governor General in Council on any appeal under this section is not duly executed by the proper Provincial Authority in that behalf, then, and in every such case, and as far only as the circumstances of each case require, the Parliament of Canada may make remedial Laws for the due execution of the provisions of this section, and of any decision of the Governor General in Council under this section.

APPENDIX B

STATISTICAL DATA FOR DIAGRAM I

The following tables give the figures on which the diagram in Chapter V is based. The figures in italics are taken from the ''Historical Statistical Survey of Education in Canada,'' Dominion Bureau of Statistics, Ottawa, 1921, pp. 48-51, and for 1923 from the ''Annual Survey of Education in Canada, 1923,'' Dominion Bureau of Statistics, Ottawa, 1925, pp. 18 and 42. The remainder have been compiled by the writer from provincial reports or as otherwise noted. The reports of the Department of Education of Prince Edward Island do not give the enrollments in elementary and secondary grades separately over the whole period under consideration. This Province has, therefore, been excluded. As the smallest of the nine Provinces, however, its exclusion has little effect on the graph. The notes to the tables indicate the extent to which the enrollment figures can be regarded as accurate. The figures for the total population of Canada are from the Sixth Decennial Census, 1921.

TABLE A

Enrollment in Elementary Grades

Province	1891	1896	1901	1906	1911	1916	1923
British Columbia ..	9,004	15,337	*20,678*	*27,286*	*42,957*	*59,597*	*85,278*
Alberta .	5,652	12,796	33,191[1]	*28,023*	*59,226*	*93,446*	*135,783*
Saskatchewan ...				*30,466*	*69,181*	*122,334*	*180,335*
Manitoba ..	23,234	36,257	49,691	*60,544*	*74,492*	*97,000*	*129,566*
Ontario	477,817	462,934	452,773	*447,337*	*473,353*	*519,701*	*565,055*
Quebec[2] ...	259,474	289,220	310,953	337,989	389,876	428,769[3]	*505,251*
New Brunswick	*58,250*[4]	*61,510*	*58,892*	*58,520*	*61,270*	*64,616*	*75,484*[5]
Nova Scotia	82,885	*94,916*	*91,114*	*92,693*	*94,234*	*99,463*	*102,370*
Total	916,316	972,970	1,017,292	1,082,858	1,264,589	1,484,926	1,779,122
Index	.76	.80	.84	.89	1.04	1.23	1.47

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[1] For 1903. This figure and those for 1891 and 1896 are the enrollment for the Northwest Territories given by the Dominion Bureau of Statistics in Statistical Report on Education in Canada, 1921, p. 59.

[2] Pupils in elementary and model grades were considered to be elementary pupils.

[3] For 1915.

[4] For 1890.

[5] The elementary total includes 36,794 pupils in ungraded schools, classified into 5 forms. The Dominion Bureau of Statistics reports them as "unclassified."

TABLE B

ENROLLMENT IN SECONDARY GRADES AND POPULATION OF CANADA

Province	1891	1896	1901	1906	1911	1916	1923
British Columbia ..	256	461	*584*	*1,236*	*1,988*	*4,973*	*9,220*
Alberta	....	....	....	*761*[1]	*2,434*	*5,755*	*12,262*
Saskatchewan	....	....	....	*809*	*3,079*	*7,105*	*13,545*
Manitoba ..	637	1,730	2,197	*3,579*	*6,336*	*6,696*	*12,803*
Ontario	36,156	43,581	*39,861*	*45,207*	*45,252*[2]	*44,106*	*67,568*
Quebec[3] ...	4,170	4,364	6,098	6,329	7,942	10,156[4]	*12,736*
New Brunswick	*320*[5]	*408*	*1,528*	*1,887*	*1,876*	*2,161*	*3,267*
Novia Scotia	1,663[6]	*6,116*	*7,296*	*7,639*	*8,676*	*9,726*	*12,088*
Total	43,202	56,660	57,564	67,447	77,583	90,678	143,489
Index	.56	.74	.75	.88	1.01	1.18	1.87

POPULATION OF CANADA

Year	Population	Index
1891	4,833,239	.74
1901	5,731,315	.82
1911	7,206,643	1.10
1921	8,788,483	1.35

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[1] Presumably some pupils doing secondary work as early as 1901 or earlier, but figures are not available and are probably very small.

[2] Seventy-seven night high school pupils omitted.

[3] The pupils in Quebec who were reported in academy grades have been considered as secondary pupils.

[4] For 1915.

[5] For 1890, New Brunswick figures throughout are for the second term. They are smaller than they would be had the enrollment for the year been given.

[6] This figure is probably too small. It represents the county academy enrollment only.

APPENDIX C

QUESTIONNAIRE SENT TO CANADIAN HIGH SCHOOL PRINCIPALS

PURPOSE OF THE QUESTIONNAIRE

A rapid survey of provincial regulations and reports and books on Canadian education disclosed a double need: (*a*) for a body of factual material on actual working conditions in the high schools of Canada, and (*b*) for a body of material of a comparable nature covering all the provinces.

The first need is evident enough when the paucity of published material on secondary education in Canada is considered. The second need is evident to anyone who has studied the reports of the Canadian Departments of Education; for a phase of school administration upon which one department reports in considerable detail is almost completely ignored by others. The information could be obtained only by extensive visitation or through a questionnaire. The latter method was chosen not because of its superiority, but because of its practicability.

SELECTION OF SCHOOLS

A rather full questionnaire was sent to all Canadian High Schools with three or more teachers on the staff. As the study has progressed, it appears that it would have been wise to send a modified questionnaire to a sampling of schools with only one or two high school teachers. At the time that the questionnaire was issued it seemed necessary to draw the line somewhere and the decision was made as has been stated.

The problem of discovering all the high schools with three teachers or more offered no little difficulty; there is no school directory covering the whole Dominion. In the end, the questionnaires were sent out to different provinces on different bases. In some cases the list was strictly governed by the three-teacher requirement; in others by the population of the districts. The number, type, and size of schools to which questionnaires were sent and the method of securing the list is indicated below for each province separately.

Ontario.—Questionnaires were sent to all collegiate institutes and high schools, 181 in number, as found in the Ontario Department of Education bulletin on ''Staffs of Collegiate Institutes, High Schools, Continuation Schools, Industrial, Technical, Art and other Vocational Schools, Normal Model Schools, and English-French Model Schools,'' November, 1923. This bulletin gives very detailed information about each teacher in the schools mentioned in the title. Few of the high schools had fewer than three teachers. No questionnaires were sent to continuation schools or to vocational schools. It would probably have been better to include some of both types but it appeared at the time that a modified questionnaire would be needed for each.

Quebec.—Questionnaires were sent to Protestant high schools only. No questionnaires were addressed to Roman Catholic schools or to Protestant intermediate schools. Protestant intermediate schools have normally only grades I to IX. Roman Catholic schools, on account of their peculiar organization and terminology, not to speak of language difficulties, were necessarily excluded unless a special questionnaire was to be framed for them alone. For the Protestant high schools a list supplied by the English Secretary was used, and in order to approximate the three-teacher rule, a selection was made from these on the basis of the population of the respective municipalities. Danville with a population of 1,290 was the smallest district selected. As a result, questionnaires were sent to 25 Protestant high schools. Several of those replying had fewer than three high school teachers.

Manitoba.—Questionnaires were sent to all collegiate institutes in Manitoba, 11 in number, according to the list given in the 1922 report of the Department of Education. Five collegiate departments to which questionnaires should have been sent were erroneously omitted. Schools smaller than collegiate institutes and collegiate departments have normally not more than two high school teachers.

Alberta.—The Department of Education kindly supplied a complete list of all the schools in the Province in which secondary work was being carried on. From this list, in order to approximate the three-teacher rule, those schools were selected which were situated in municipalities of approximately 1,000 people or more. Thirty-seven questionnaires were sent.

New Brunswick.—Questionnaires were sent to six New Brunswick grammar schools taken from the list published in the 1921-22 Report of the Chief Superintendent. The three-teacher rule was waived in this case, owing to the small number of high schools of the required size. Schools with two high school teachers were included.

Saskatchewan.—Questionnaires were sent to all collegiate institutes and high schools, 21 in number, according to the list published in the 1922 report of the Department of Education. No questionnaires were sent to schools operating secondary continuation classes. It was presumed that these would have fewer than three high school teachers.

British Columbia.—The annual report of the Department of Education gives a list of all the public schools of the province. Among other details the entire staff of each school is listed. Thirty-six questionnaires were sent to schools having three or more high school teachers according to the list contained in the 1922-23 report.

Nova Scotia.—The Department of Education publishes a list of schools by school sections. This list contains a column in which the number of teachers in each section is given. This number includes both elementary and high school teachers. Questionnaires were sent to every section in which ten or more teachers were employed. It was assumed that in this way no school with three or more high school teachers would be omitted. The list used is undated. Twenty-nine questionnaires were sent.

Prince Edward Island.—No questionnaires were sent. Only one school, Prince of Wales College, carried the high school course beyond grade X.

DISTRIBUTION OF QUESTIONNAIRES SENT AND RECEIVED

Table C below shows the number of questionnaires sent to each of the provinces, and the number and percentage of replies received from each province. Of the total of 346 questionnaires sent out, 140 were returned. Table D gives the distribution of these 140 replies on the basis of the number of high school teachers on the staff of the school replying.

TABLE C

QUESTIONNAIRES SENT AND RECEIVED

Province	No. of Questionnaires Sent	No. of Replies Received	Per Cent * Returned
British Columbia	36	12	33
Alberta	37	14	38
Saskatchewan	21	6	29
Manitoba	11	5	45
Ontario	181	80	44
Quebec (Protestant) ...	25	10	40
New Brunswick	6	2	33
Nova Scotia	29	11	38
Total	346	140	40

* The nearest whole number is given.

TABLE D

DISTRIBUTION OF 140 REPLIES RECEIVED, ACCORDING TO THE NUMBER OF HIGH SCHOOL TEACHERS IN THE SCHOOLS REPLYING

Province	No. of High School Teachers on the Staff					
	21 or more	11 to 20	6 to 10	3 to 5	Fewer than 3	Total
British Columbia ...	1	2	5	4	..	12
Alberta	..	3	3	5	3	14
Saskatchewan	2	..	2	2	..	6
Manitoba	2	..	3	..	..	5
Ontario	5	15	20	38	2	80
Quebec (Protestant)*	2	1	1	3	3	10
New Brunswick	1	..	..	1	..	2
Nova Scotia	..	..	3	5	3	11
Total	13	21	37	58	11	140

* In several high schools in which grades I to XI are taught, the principal reported all teachers; the number of high school teachers was therefore estimated.

HOW REPRESENTATIVE ARE THE QUESTIONNAIRE REPLIES?

From the two tables just preceding and from the remarks made on the method of selecting schools in the various provinces the following conclusions may be drawn.

1. Certain types of public schools are not represented, namely:
   (*a*) The primary vocational schools of the Roman Catholic system of Quebec.
   (*b*) The separate vocational schools of Ontario.

2. The questionnaire replies do not necessarily represent conditions in the large number of schools with fewer than three high school teachers.

3. In sending out the questionnaire an attempt was made to reach all public high schools (except the primary vocational schools of the Roman Catholic system of Quebec) which had three high school teachers or more. Some schools of this kind were undoubtedly missed. The more important omissions are:
   (*a*) Schools under 1 (*b*) above; estimated number omitted, 8.
   (*b*) Collegiate departments in Manitoba; number omitted, 5.
   (*c*) Some of the continuation schools of Ontario; number omitted, 24.
   (*d*) A few where the questionnaires were sent out on the basis of population or on the basis of all teachers in the section.

The last of these omissions cannot be estimated exactly, but the total of all omissions may be estimated at 50 schools. Questionnaires were sent to 346 schools, and 129 schools with three or more high school teachers replied. If the 50 omitted schools are added to the 346, the total of 396 represents the probable number of public high schools in the Dominion (omitting the Roman Catholic system of Quebec) which have at least three high school teachers. One hundred twenty-nine, or 32.6 per cent, of these replied. It may be said, therefore, that the questionnaire replies represent about one-third of all the public high schools in Canada which have at least three high school teachers.

4. More than half, approximately 57 per cent, of the replies were received from the Province of Ontario. This gives Ontario a little more weight in any Dominion-wide summary of questionnaire replies than its high school enrollment warrants. It is also true that excluding schools with fewer than three teachers makes the results less representative of the conditions in the thinly settled portions of the West than of Ontario.

5. The percentages of questionnaires returned from the several provinces do not vary greatly so that within the limits of the schools which were circularized the results will be fairly representative of high school conditions in the country as a whole as far as a one-third sampling can guarantee.

THE QUESTIONNAIRE

The complete questionnaire as it was sent out is reproduced on the following pages. The information furnished in reply to several parts of the questionnaire, owing to the necessity of limiting the treatment, was with regret excluded from the present report.

QUESTIONNAIRE TO CANADIAN HIGH SCHOOL PRINCIPALS *

Province................ Enrollment.............. Number of Teachers.......

Note—Please read each section through before beginning to answer the questions.

A. THE HIGH SCHOOL PRINCIPAL

1. Age.... 2. Annual salary 1923-24, $..... 3. Length of educational service: (*a*) in an elementary school .... years, (*b*) in a high school ** excluding (*c*) .... years, (*c*) as a high school principal .... years, (*d*) in other educational positions .... years. ....
Specify positions ....
....
(*e*) Total educational service .... years. 4. Time in present position .... years. 5. Number of changes of educational position .... years. 6. Non-professional (academic) preparation of college grade:

INSTITUTION	LOCATION	NUMBER OF YEARS OF STUDY	DEGREES
....	....	....	....
....	....	....	....
....	....	....	....

7. Subjects of special interest in college ....
8. Professional preparation:

INSTITUTION	LOCATION	NUMBER OF MONTHS OF STUDY	CERTIFICATES
....	....	....	....
....	....	....	....
....	....	....	....

9. As high school principal average amount of time spent daily: (*a*) in school duties of all kinds .... hours, (*b*) in teaching .... hours, what subjects ....
(*c*) in office work .... hours, (*d*) in supervision of classroom instruction .... hours, (*e*) in inspection of the school plant .... hours, (*f*) in extra classroom activities (see section F) .... hours, 10. Clerical assistants to the principal, (*a*) number part time .... for .... hours a day, (*b*) number full time .... 11. List the authors and titles of the five professional books which you have found most helpful in the past year or two.

....

....

....

12. Comment on any part of section A. ....

....

....

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* For the purposes of this questionnaire a high school will be defined as one which offers at least three years of instruction in advance of the elementary school.

** Include teaching experience in which at least 50 per cent of your time was devoted to studies in advance of the elementary school.

B. THE TEACHING STAFF *

1. New appointments to the staff recommended by the principal: always, usually, sometimes, never. (Underscore the appropriate term.) 2. Total teachers 1923-24 ....men ....women .... 3. Number without a university degree .... 4. Number with (*a*) less than one year's professional training .... (*b*) less than six months .... 5. Number of teachers new to the school this year ** ....men......women ...... 6. Number of these new teachers in first high school teaching position ...... 7. Can you give the weekly pupil-recitation load for each one of your staff? *** ...... If so, please enclose on a separate sheet. 8. (*a*) Have you heads of departments with defined duties? ....

(*b*) If so, specify major duties ....

....

....

....

(*c*) Reduction of teaching time for department heads ...... hours weekly. 9. (*a*) Do you hold teachers' meetings? .... (*b*) How often? .... (*c*) Is attendance compulsory? .... (*d*) Usual hour .... (*e*) Usual day .... (*f*) Usual duration .... hours, (*g*) Indicate agenda of most recent meeting ....

....

....

....

....

....

10. (*a*) Are meetings held of teachers by departments? .... (*b*) How often? .... (*c*) Is attendance compulsory? .... (*d*) What is any one department doing at its meetings? ....

....

....

11. Comment on any part of section B. ....

....

....

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....

....

....

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* Consider no teacher who does not devote more than 50 per cent of his time to pupils in advance of grade VIII (or senior fourth).

** "This year," unless otherwise defined, means, throughout the questionnaire, the school year 1923-24.

*** The weekly pupil-recitation load for any teacher equals the sum of the average attendances in all his class periods (recitations) during the week. This information could readily be obtained by requesting each teacher to compute his own pupil-recitation load.

Example: Pupil-recitation load of Miss X. Y., a teacher of English.

English I, section
(*a*), 5 periods a week, av. attendance, 30—150 pupil-recitations.
(*b*), 5 periods a week, av. attendance, 33—165 pupil-recitations.
(*c*), 5 periods a week, av. attendance, 37—185 pupil-recitations.

English II, section
(*a*), 5 periods a week, av. attendance, 29—145 pupil-recitations.
(*b*), 5 periods a week, av. attendance, 24—120 pupil-recitations.
English III, section
(*a*), 4 periods a week, av. attendance, 26—104 pupil-recitations.
(*b*), 4 periods a week, av. attendance, 23— 92 pupil-recitations.
English IV, 4 periods a week, av. attendance, 21— 84 pupil-recitations.
1045 pupil-recitations.

Weekly pupil-recitation load for Miss X. Y. is 1045.
When reporting the pupil-recitation load of each teacher please state what subjects he teaches.

C. INSPECTION AND SUPERVISION

1. Provincial inspector: (*a*) number of visits yearly ...... (*b*) most recent visit: (1) date ...... (2) time spent in your school ...... hours, (3) time spent in classroom inspection ...... hours. 2. Municipal (local) inspector (supervisor, superintendent): (*a*) Have you such an official? ...... (*b*) average number of visits to your school yearly ...... (*c*) average time spent each visit ...... hours, (*d*) average time spent each visit in classroom supervision ...... hours. 3. Supervisors of special subjects: (*a*) Do you have any? ...... (*b*) local, provincial (underscore), (*c*) of what subjects? ......
....
(*d*) average number of visits yearly ...... (*e*) average time each visit in classroom supervision ...... minutes. 4. (*a*) From which type of supervision (1, 2, or 3 above) does the school derive most assistance? ....
(*b*) In what way? ....
....
....
....
5. Comment on any part of section C. ....
....
....
....
....
....

D. GUIDANCE AND PROMOTION OF PUPILS

1. (*a*) Choice of curriculum (e. g., teachers; matriculation) made by pupils, parents, teachers, principal (underscore one or more). (*b*) What, if any, organized method of trying to find out a pupil's bent? ....
....
....
....
....
....
2. (*a*) Promotion by subjects? ...... (*b*) By grades or years? ...... (*c*) If by grades, how many subject failures debar from promotion? ....
....
3. What, if any, provision do you make for a pupil to progress through the school at a rate commensurate with his ability? ....
....
....
....
....
....

BLANK FOR REPORTING TIME-TABLE (SECTION E)

Subject	Periods and minutes in each year of the high school course									
	I		II		III		IV		V	
	Periods	Minutes	P.	M.	P.	M.	P.	M.	P.	M.
English										
French										
German										
Latin										
Greek										
Arithmetic										
Algebra										
Geometry										
Trigonometry										
General Science										
Elementary Science										
Experimental Science										
Physics										
Chemistry										
Botany										
Zoölogy										
Geography										
Physiography										
Agriculture										
Canadian History (including Civics)										
British History										
Ancient History										
General History										
Manual Training										
Household Science										
Art										
Music										
Physical Education										
Vocational Courses										
Commercial										
Wood and Metal Work										
Agricultural										
Homemaking										
....										
....										
....										
....										
....										

4. Comment on any part of section D...................................

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....

E. CURRICULUM (COURSES OF STUDY)

1. (*a*) What determines the content of any course (e. g., French, algebra) in any year? prescribed textbooks, outlines furnished by the Department, outlines made by teachers (underscore one or more). (*b*) If the last, indicate in what subjects and to what extent this freedom is exercised ....

....

....

....

2. What clearly differentiated curricula (e. g., general, teachers') are offered in your school? ....

3. School year consists of ...... teaching weeks. 4. Number of class-periods a day ...... 5. Length of class-periods ...... minutes. 6. Number of class-periods and number of minutes *per week* allotted to various subjects in the several years. [*See form on opposite page.*]

In filling out the table consider only courses in advance of grade VIII (senior fourth).

When a subject is studied for less than a full year indicate by a fraction placed in front of the periods under the appropriate year. This table will be interpreted thus: A pupil studying French will have, say, 5 periods or 200 minutes a week in his first year, 5 periods or 200 minutes a week in his second year, and so on. Put a circle around the number of periods in the appropriate years of the various subjects which are *required of all* pupils in your school.

F. EXTRA-CLASSROOM ACTIVITIES (A GENERAL TERM EMBRACING SOCIAL, CLUB, AND ATHLETIC ACTIVITIES)

1. (*a*) Is there in your school a recognized general student organization for pupil participation in school government? ....

....

(*b*) Give a recent noteworthy instance of what it has accomplished ....

....

....

2. Check (√) from the following list the student organizations which are active in your school. Add others.

( ) Literary Society
( ) Boys' Athletic Association
( ) Girls' Athletic Association
( ) Dramatic Club
( ) Debating Club
( ) Science Club
( ) French Club

( ) Thrift Club
( ) Cadet Corps
( ) Orchestra
( ) Glee Club
( ) Art Club
( ) ....
( ) ....

( ) ....
( ) ....
( ) ....
( ) ....
( ) ....
( ) ....
( ) ....

3. Do you have: (*a*) a newspaper? ...... typed, mimeographed, printed (underscore), published how often? ...... (*b*) a student's handbook? ...... (*c*) a magazine? ...... (*d*) an "Annual"? ...... 4. (*a*) Must every club or society have a teacher as adviser? .... (*b*) Is it customary? .... 5. Do clubs meet during school hours? ...... 6. Is any limit officially set to the number of clubs to which a pupil may belong? ...... 7. (*a*) Do you have

regular "assemblies" of the whole school during school hours? ...... (*b*) How often? ...... (*c*) At what hour? ...... (*d*) Usual duration? ..... (*e*) Sketch a typical program ....

....

....

....

....

8. Check (√) the statement which more accurately describes the athletic situation in your school.
( ) The school team on the field and the school on the sidelines.
( ) Every normal pupil playing regularly an appropriate school game.
9. Do you consider that extra-classroom activities have unique, much, little, no (underscore) educational value? 10. Check the policy toward extra-classroom activities which you favor. ( ) encouragement, ( ) encouragement under faculty guidance, ( ) leaving pupils to their own devices, ( ) reduction of extra-classroom activities to a minimum.
11. Is the control of extra-classroom activities a pressing problem in your school? ....
12. Comment on any part of section F. ....

....

....

....

....

G. LIBRARIES

1. For pupils, (*a*) size of reading room ...... feet by ...... feet. (*b*) number of volumes ...... (*c*) number of periodicals ...... (*d*) number of additions this year ...... (*e*) number of volumes used per week (if such a record is available) ...... (*f*) librarian: trained, untrained (underscore), full time ...... part time ...... giving ...... hours a day to library work. 2. Professional library for teachers: (*a*) number of volumes ...... (*b*) number of periodicals ...... (*c*) number of additions this year ...... 3. Your comments on any part of section G ....

....

....

....

....

I. HEALTH

1. (*a*) Regular medical inspection of all pupils? ..... (*b*) How often? ..... (*c*) Of the teaching staff? ...... (*d*) How often? ...... 2. (*a*) Free medical treatment of pupils provided? ...... (*b*) Number of cases this year ...... 3. (*a*) Regular dental inspection of all pupils? ...... (*b*) How often? ...... 4. (*a*) Free dental treatment provided? ...... (*b*) Number of cases this year. 5. (*a*) Is there a school nurse? ...... (*b*) Devoting full time to your school? ...... (*c*) Part time? ...... giving ...... hours a week. 6. (*a*) Is there a gymnasium in your school? ...... (*b*) Elsewhere used by the school? ...... (*c*) In the latter case, where? ...... 7. Number of hours a week physical exercise compulsory on all pupils ...... hours. 8. Approximate acreage of the school playgrounds ......

9. Comment on any part of section I. ....

....

....

....

J. FEES
1. Fees charged to resident pupils, $.............. a month.
2. Fees charged to nonresident pupils, $............ a month.

K. YOUR NAME ....
(Last name) (First name) (Middle name))

L. YOUR SCHOOL ....
....
(city, town or village) (Province)

When complete please return to:

W. F. DYDE
Teachers College, Columbia University,
525 West 120th Street, New York City,
New York, U. S. A.

CONTRIBUTING PRINCIPALS

The names and addresses of the high school principals in each of the Provinces who coöperated in this study by responding to the questionnaire are given in the following list.

BRITISH COLUMBIA

PRINCIPAL	HIGH SCHOOL
Beddowe, James B.	Fernie
Bowles, Allan	King George V High School, Vancouver
Calder, Thos. Hanning	Revelstoke
Downes, Gordon	Oak Bay, Victoria
Fergusson, George Arthur	King Edward High School, Vancouver
Girling, Richard Henry Lacy	Surrey High School
Johnston, Daniel B.	King George High School, Vancouver
Lister, James George	Vancouver Technical High School
McNab, James Willard	Kamloops
Reid, William T.	Grand Forks
Rogers, L. V.	Nelson
Woodworth, Victor	Chilliwack

ALBERTA

Aberhart, William	Crescent Heights High School, Calgary
Bailey, Percy Simpson	Edmonton Technical High School
Colter, Robert K.	Peace River
Keith, Willard A.	Magrath
Locke, Cyril Durant	Red Deer
McGuire, John	Ponoka
Poaps, Wm. Byron	Hanna
Sheppard, Ross S.	Strathcona High School, South Edmonton

ALBERTA (*Continued*)

PRINCIPAL	HIGH SCHOOL
Stanley, Thos. E. A.	South Calgary
Suckling, Wm. Thorley	Wainwright
Sweet, Harry Charles	Claresholm
Tanner, Harold E.	Stettler
Thurber, Ronald Eugene	Edson
Williams, Leo W.	High River

SASKATCHEWAN

Brown, Geo. Allen	Prince Albert
Cain, Ruby Utah	Lloydminster
Cameron, Aldis Warren	Nutana Collegiate Institute, Saskatoon
Dolon, Geo. Robt.	Regina Collegiate Institute
Halligan, T. W.	Wilkie
Perkins, Henry	Humboldt

MANITOBA

Ball, Wilmot Nelson	Dauphin
Campbell, Alex. Chas.	St. John's Technical High School, Winnipeg
Hamilton, James Reid	Portage la Prairie Collegiate Institute
Hodgson, R. T.	Kelvin Technical High School, Winnipeg
Watson, H. Wm.	St. James

ONTARIO

Adams, John Gordon	Oshawa
Andrews, Robt. T.	Newburgh
Barlow, Frederick Joseph	Chesterville
Barrett, W. J. C.	Williamstown
Brackenburg, Geo. Leonard	Wingham
Brown, Duncan	Cayuga
Butcher, Cecil Ward	Shelburne
Caldwell, Alex.	Cornwall
Campbell, Archibald, D.	Athens
Campbell, Daniel Alex.	Sarnia
Campbell, Wm. Alex.	Iroquois
Cooper, Alex. B.	Parkhill
Copeland, Geo. E.	Whitby
Davies, Norman	Amherstburg
Dickson, J. D.	Niagara Falls
Donaldson, Wm.	Hagersville
Douglas, Adam C.	Hawkesbury

ONTARIO (*Continued*)

PRINCIPAL	HIGH SCHOOL
Elliott, Thos. William	Dutton
Elmslie, Wallace	Owen Sound
Erwin, W. M.	Clinton
Evans, Geo. Elmo	Smiths Falls
Gale, Ewart Inglis	Deseronto
Gilmour, Allan	Port Elgin
Gray, Robt. Alex.	Oakwood Collegiate Institute, Toronto
Griffin, Jos. M.	Plantagenet
Hackett, Edward	Orangeville
Hagarty, Ed. Wm.	Harbord Collegiate Institute, Toronto
Halpenny, David M.	Stirling
Hardy, John H.	Perth
Haynes, Andrew Chester	Thorold
Henry, Thos. McKee	Arnprior
Hicks, Thos. Jas.	Caledonia
Hodgins, Ekron Portice	Woodstock
Howell, Wm. B. L.	Port Arthur
Howson, Bruce Fulford	Dundas
Hume, J. P.	Goderich
Husband, A. J.	Brockville
Jones, Wm. Chas.	Fort Frances
Jonson, Miss Margaret A.	Port Dover
Judge, Albert E.	Smithville
Keenan, E. J.	Bradford
Kenner, Henry R. H.	Peterborough
King, Reginald H.	Scarboro
Kirkconnell, Thos. A.	Lindsay
Knowles, John Hillis	Aurora
Lawrence, Chas. F.	Grimsby
Lehmann, Carl A.	Malvern Avenue Collegiate Institute, Toronto
Massey, Arthur Wallace	Kingsville
McGill, David Hopper	Ingersoll
MacKay, Donald	Alexandria
MacLaurin, Peter Crawford	Belleville
MacLean, G. V.	Wiarton
McMillan, Roy John	Prescott
McNab, Finlay	Gravenhurst
Menzies, Leslie P.	Strathroy
Might, Lincoln O.	Newcastle
Myer, A. N.	Stamford High School, Niagara Falls
Nelson, Albert Ernest	Kincardine

ONTARIO (*Continued*)

PRINCIPAL	HIGH SCHOOL
Preston, Alexander	Fergus
Rand, Wilfred Erle	Vankleek Hill Collegiate Institute
Robins, John James	Midland
Rowntree, Annie E.	Waterford
Rudlen, Geo. Wm.	Sault Ste. Marie Collegiate Institute
Salter, Wesley John	St. Catharines Collegiate Institute
Smith, Gilbert A.	Parkdale Collegiate Institute, Toronto
Spencer, W. George	Seaforth
Speirs, Thos. E.	Mount Forest
Starr, Hannah Jane	Morewood
Stewart, James Henry	Richmond Hill
Sutherland, Donald Angus	Lucan
Traver, Edith A.	Thessalon
Tuke, William H.	Haileybury
Wallace, Frank Douglas	North Bay Collegiate Institute
Welsh, David Alexander	Burlington
Whyte, Robert	Trenton
Williams, Albert	Forest
Wood, Elmore Everton	Fort William Collegiate Institute
Young, Gordon	Norwich
Young, Ralph H.	Ridgetown

QUEBEC (PROTESTANT)

Adams, Claude Adalbert	Granby
Brunt, John William	Lachute
Ford, Charles William	St. Lambert
Gammell, I.	Montreal High School
Hall, Evangeline	Waterloo
Howe, Ralph Edwin	Westmount
Jackson, Charles Adams	Lachine
Jenks, Catherine Eveleigh Cole	Magog
Seiveright, Dorothy Jean	Bedford
Walsh, W. Allen	Strathcona Academy, Outremont

NEW BRUNSWICK

Myles, Wesley J. S.	St. John
Wallace, D. W.	Woodstock

NOVA SCOTIA

PRINCIPAL	HIGH SCHOOL
Sister Rose Catherine	St. Patrick's Girls' High School, Halifax
Brannen, Wallace Ellsworth	Parrsboro
Coldwell, Ray Lloyd	Cape Breton
Morton Silvanus A.	Halifax
Osborne, N. A.	Windsor
Spencer, Charles Wm.	North Sydney
Spracklin, Baxter Garfield	Sydney Mines
Stapleton, William Clarke	Dartmouth
Trask, James Logan	Kentville
Wyman, Harry Joseph	Yarmouth
One report unsigned	

APPENDIX D

ADDITIONAL TABLES CONTAINING DATA ON THE ORGANIZATION OF STUDIES

The following tables give additional data on the organization of studies. Tables E, F, G, and H reproduce the time-tables of certain representative schools. Tables I and J list the number of pupils studying the various subjects in the six provinces and the number of minutes per week given to the different subjects in five provinces.

TABLE E

TIME-TABLE OF A BRITISH COLUMBIA HIGH SCHOOL ENROLLING SEVEN HUNDRED FIVE PUPILS, 1923-24

Subject	No. of Periods per Week in Each Year		
	Grade IX	Grade X	Grade XI
English	5	5	5
French	A5	C5	D6
German			D5
Latin	A5	C5	D6
Arithmetic	3	2	
Algebra	3	4	5
Geometry	3	4	4
General Science	A3		
Physics		C5	D4
Chemistry		C3	D5
Botany			D3
Geography			D3
History	2	4	3
Manual Training	B3–4	B2	
Household Science	B2	B2	
Art	2	B2	B3
Music	B1	B1	B1
Physical Education	B2	B2	
Periods prescribed per week	26 or 28	27 or 29	30 to 34

Note: Periods are 40 minutes in length.

EXPLANATIONS OF TABLE E

The explanations are based on Department of Education Courses of Study for the Elementary, High, Technical, and Normal Schools of British Columbia, Victoria, 1923.

A. Pupils may substitute general science for one foreign language.

B. These courses are not required by the Department of pupils going to college or into the normal schools.

C. Pupils must take either two languages and a science or two sciences and a language.

D. Pupils who are going to college or normal school will take either three languages or two languages and a science or two sciences and a language. Pupils entering the normal schools in 1924 were required to substitute the course in geography for a second science or a second language. There was also a difference made for them in the topics to be covered in history.

Comparison with Ten Other British Columbia High Schools

English.—The time given to English by the other schools is usually greater.

Languages.—French and Latin are offered through three years in all the schools reporting. Only two schools report a third language: in one case Greek, in the other German, both in the third year.

Science.—All schools reporting except one offer physics and chemistry in the second and third years. In the single case physics appears in the third year only. General science occurs regularly in the first year. Only two of the ten schools do not report it here. Botany is offered by four of the ten schools, and in three of them it is given in both the third and fourth years.

History and Geography.—Geography appears in the third year in nine of the ten schools. All the schools give history in each year; most of them give a little more time to it.

Mathematics.—This arrangement is common to all the ten schools.

Manual Training and Household Science.—The two largest schools reporting are the only ones which offer either.

Art.—All the schools report art, but this is the only school which has more than one year of it.

Music.—This is glee club work in the school selected. None of the others reports it.

Physical Education.—Only three of the ten schools report it.

TABLE F

TIME-TABLE OF A COLLEGIATE INSTITUTE IN SASKATCHEWAN ENROLLING THREE HUNDRED TEN PUPILS, 1923-24

Subject	No. of Periods per Week in Each Year			
	Grade IX	Grade X	Grade XI	Grade XII
English	6	7	9	9
French	A3	A3	C4	E4
Latin	A3	A4	C4	E4
Arithmetic	B3	B4	3	
Algebra	B3	B4	4	3
Geometry	B3	B3	4	4
Trigonometry				3
Elementary Science	3	3		
Physics			C4D	E4F
Chemistry			C4D	E4F
Agriculture			C2	
Geography	3			
History	4	3	4	5
Physical Education	2	2	2	2
Prescribed periods per week for the "Teachers Course"	27	25–27	36–38	38

NOTE: Periods are 38 minutes in length.

NOTES TO TABLE F

Changes have been made in the regulations for the year 1925-26 of which the principal results are:

1. Geography is added to the prescribed subjects in grade X.
2. Arithmetic is removed from the prescribed list in grade XI.
3. Geometry is removed from the optional list in grade IX.
4. Algebra is removed from the optional list in grade X.

Department of Education, Saskatchewan, Circular for Teachers and Students, 1925-26, p. 8.

EXPLANATIONS OF TABLE F

The Explanations are based on Department of Education, Regulations and Recommendations governing Programme of Courses of Study for Secondary Schools, Regina, 1923.

In Saskatchewan the "Teachers Course" for entrance to the normal schools is basic. Pupils who intend to go to college will choose the language options needed. In the time-table illustrated, subjects are prescribed unless otherwise noted. The options allowed are as follows:

A. In the first year of the "Teachers Course" at least one of the following subjects must be offered: art, music, home economics, manual training, a foreign language, commercial work (either bookkeeping or stenography and typewriting). In the second year at least one of art, music, home economics, manual training, a foreign language, must be taken. The school has made its own selection from the programme with a view to giving pupils going to college an opportunity of selecting the needed languages. The pupil destined for college must have two languages for Arts and one language for the other faculties.

B. At least two must be taken.

C. Three must be taken. The provincial programme says three of physics, chemistry, home economics, Latin, French, German, Greek, agriculture. The school has made its own selection.

D. One of these must be taken when the three subjects allowed in C are being selected. The provincial programme prescribes one of physics, chemistry, or home economics. The school has chosen not to offer the home economics option.

E. Three must be taken. The provincial programme prescribes three of physics, chemistry, biology, Latin, French, German, Greek. The school has chosen to offer four of these.

F. In the selection of the three subjects under E, one of these must be chosen. The provincial programme says one of physics, chemistry or biology. The school does not offer biology.

Comparison with Four Other Schools

The small number of schools under comparison makes it difficult to say certainly that any given arrangement of course is typical. The explanations already given show the variations which may be allowed by provincial regulation. The courses shown in the time-table are the ones selected by the other schools which reported with the exception that one school, a large one with 1,150 pupils, extended its offerings to include household science, manual training, art and music: a second school was peculiar in offering no French. Not all schools, of course, will have a fourth year.

TABLE G

TIME-TABLE OF A COLLEGIATE INSTITUTE IN MANITOBA ENROLLING TWO HUNDRED THIRTY-NINE PUPILS, 1923-24

Subject	No. of Periods per Week in Each Year			
	Grade IX	Grade X	Grade XI	Grade XII
English	C10	C10	C8	12
French	C5A	C4A	C6A	5A
Latin	C5A	C4A	C6A	5A
Arithmetic	C4	C4		
Algebra	C2B	C3	C4	4
Geometry	C1B	C2	C4	3
Trigonometry				3F
General Science	C6	C6		
Physics			C3	5
Chemistry		C1	C4	4F
Geography			C1D	
History	C4	C4	C4	3F
Art	2			
Music		1		
Physical Education	2½	2½	2½	2½
Periods per week prescribed for "Combined Course" (physical education excluded)	32	34	34	32 or 33

NOTE: Periods are 40 minutes in length.

EXPLANATIONS OF TABLE G

The Explanations are based on the Programme of Studies for the Schools of Manitoba, authorized by the Advisory Board July 1, 1923.

The Programme outlines a "Teachers Course" of three or four years, a "Matriculation Course" of three years; a "Combined Course" of three years which bridges the first two, and a "Commercial Course" of two years which is designed to prepare pupils for positions in the commercial field and at the same time to fit them to proceed to grade XI in any one of the other three curricula. (Programme, p. 32.) The first three differ from one another, in the main, by making provision for no foreign language, two foreign languages, and one foreign language respectively. The three-year "Teachers Course" is lighter than either of the others. The "Commercial Course" in the first two years is heavy. The pupil must fulfill the requirements for the "Combined Course," and assume shorthand, typewriting, and bookkeeping in addition. If he goes on to grade XI his commercial credit operates to relieve him of a science.

A. The Programme prescribes for the "Combined Course" Latin or Greek or French or German. The pupil is permitted to carry a second foreign language. If he does, he is advised to begin it in the second half of the first year.

B. The Programme prescribes arithmetic as the only mathematical subject in the first year. The school has added algebra and geometry, apparently having found it difficult to cover the prescribed work in the periods which could be spared for mathematics in the second and third years.

C. These are the subjects which this school offers that are either required or permitted as options in the three-year "Combined Course."

D. The Programme does not mention this subject in the third year. Presumably it is a period in which the geography related to the course in history is emphasized. It has not been considered a separate subject.

E. The fourth year of the high school course in 1923-24 did not give credit for first year in Arts. This year is taken by pupils who are looking forward to receiving First-Class Certificates after a year in normal school. A pupil may offer either none, one, or two foreign languages. The one-language option is illustrated.

F. One of history or chemistry or plane trigonometry is prescribed.

Comparison with Four Other Schools

Five schools in Manitoba sent complete reports of their time-tables. Two of these, large schools in Winnipeg, both with more than 1,000 pupils enrolled, show a more extensive offering of subjects. Greek and German are taught in both schools during the second and third years, and manual training, household science, and commercial work are added in both. One of them also shows a considerable range of technical courses. The other three are medium-sized schools. Two of them do not offer fourth-year courses. With respect to the courses of the first three years, the principal divergences from the time-table illustrated are in the science of the third year. It is possible, for instance, for women to meet the requirements of the "Teachers Course" with physics of the third year (Programme, p. 50). A pupil in the "Combined Course" or in the "Matriculation Course" who takes two foreign languages may omit both physics and chemistry. (Programme, p. 39.) A pupil who is taking the "Matriculation Course" with two foreign languages, may lighten his science course in the first two years and offer either physics or chemistry in his third year (Programme, p. 39). As a result of these possible variations, schools may decide to include in the third year of their own time-tables either or both or neither of physics and chemistry. It so happens that of the three medium-sized schools reporting, one offers chemistry, one neither physics nor chemistry, and the third, which furnishes the present illustration, offers both. There are also some differences in the courses in art and music.

TABLE H

Time-Table of a Nova Scotia County Academy with One Hundred Eighty-Six High School Pupils, 1923-24

Subject	No. of Periods per Week in Each Year			
	Grade IX	Grade X	Grade XI	Grade XII
English	4*	3*	5*	4
French	4*	3*	2*	3
German		2	2	3
Latin	3*	3*	3*	4
Arithmetic	2*	3*		
Algebra	3*	3*	3*	3
Geometry		2*	3*	2
Trigonometry			3*	2
Physics		4*		3
Chemistry			3*	3
Botany	A3*			2
Physiography	A2*			
Manual Training	A1			
Household Science	A1			
Geography	2			
History		2	2	2
Art	2			
Periods per week in a recommended curriculum for prospective teachers.	21	21	24	

Note: The periods are 45 minutes each except in the case of manual training and household science of the first year, where the periods are 120 minutes, and in botany of the fourth year, where the periods are 60 minutes.

Explanations of Table H

The following tabulation of the high school programme is based on that issued in the Journal of Education, Nova Scotia, October, 1923, pp. 230-37.

Grade IX	Grade X	Grade XI	Grade XII
1. English	1. English	1. English	1. English (2 papers)
2. Latin	2. Latin	2. Latin	2. Latin (2 papers)
3. French	3. French	3. French	3. French
4. Geography	4. German	4. German	4. German
5. Arithmetic	5. Greek	5. Greek	5. Greek (2 papers)
6. Algebra	6. History	6. History	6. History
7. Drawing	7. Arithmetic	7. Algebra	7. Algebra
8. Science	8. Algebra	8. Trigonometry	8. Trigonometry
Any two: Botany	9. Geometry	9. Geometry	9. Geometry
Agriculture	10. Physics	10. Chemistry	10. Physics
Physics			11. Chemistry
Mechanic Science			12. Botany
Domestic Science			

EXPLANATIONS OF TABLE H (*Continued*)

Grades IX, X, and XI: English and any five other subjects are imperative.

Grade XII: Nine papers out of fifteen constitute a full course. The following subjects are imperative: English, two foreign languages, one mathematical and one scientific subject; except that those who take both Latin and Greek may omit the scientific subject and those who make an average of 70 or 60 on English may omit foreign languages.

As may be observed in the tabulation of the high school programme, any two of these courses will be taken by those pupils who select science as one of the six subjects prescribed as a minimum.

The starred courses will make up a recommended curriculum for those who are proposing to enter the normal school at the end of their third high school year. The recommended curriculum is based on the following statements in the Journal of Education, the semiannual supplement to the report of the Superintendent of Education, for October, 1923, p. 237. "The Advisory Board considers that a knowledge of Latin and another foreign language by all teachers is highly desirable," and "High school students who look forward to teaching and who have in view their professional preparation at the Normal College should, as far as possible, prepare themselves in the mathematical and natural science of the high school grades."

Comparison with Eleven Other Schools

(Ten schools sent complete reports, one reported in part.)

Length of Period.—Only one of eleven schools reporting indicated a period shorter than 40 minutes. The other ten range from 40 to 55 minutes.

English.—English is not given as large a time allotment in Nova Scotia as in Ontario and the West.

Foreign Languages.—Of ten schools whose reports were usable, all give Latin and French through the first three years except Halifax County Academy which has no grade IX class, and a second school which gives only two years of Latin. Four of the larger schools offer a third language, German or Greek, for one or two years. None has four languages.

Mathematics.—This is the regular sequence. Nine of ten schools have it as illustrated.

Science.—One of ten schools reports no science. Eight of the remaining nine have physics and chemistry in the second and third years. The ninth school offers chemistry only. Six of the ten schools have some elementary science in the first year.

History and Geography.—Seven of ten schools have the arrangement illustrated. One of the remaining three schools puts history in the first year with none in the second. Another has history through three years. The third has no grade IX class in the school. A little more time is usually given to history than in the school illustrated.

Art.—Five of ten schools have it as given.

Manual Training and Household Science.—Only three of ten schools have either.

Physical Education.—Only three schools mention it. One reports it (as given) occasionally, a second, *en masse* once a week; a third, ten minutes a day.

TABLE I

NUMBER OF MINUTES PER WEEK DEVOTED ON THE AVERAGE TO CERTAIN HIGH SCHOOL SUBJECTS IN FIVE PROVINCES, TOGETHER WITH THE NUMBER OF SCHOOLS IN EACH PROVINCE WHOSE DATA WERE EMPLOYED

Subject	Nova Scotia		Ontario		Saskatchewan		Alberta		British Columbia	
	No. of Schools	No. of Minutes per Week	No. of Schools	No. of Minutes per Week	No. of Schools	No. of Minutes per Week	No. of Schools	No. of Minutes per Week	No. of Schools	No. of Minutes per Week
English	9	179	20	234	4	233	8	229	10	237
History	9	123	20	164	5	133	8	129	10	112
Geography	7	120	20	160	5	87	6	92	9	132
Arithmetic	9	128	20	188	5	111	8	115	10	130
Algebra	9	132	20	186	5	109	8	133	10	171
Geometry	9	129	20	181	5	107	8	123	10	168
Trigonometry	9	114	16	143	..	...	6	140	..	...
French	9	141	20	174	5	127	7	135	10	205
German	..	...	12	161	..	...	..	...	..	...
Latin	9	150	20	183	5	139	6	139	10	205
Greek	..	...	6	166	..	...	..	...	..	...
Zoölogy	..	...	17	170	..	...	..	...	..	...
Botany	4	115	18	169	..	...	..	...	3	132
Chemistry	9	123	19	201	5	163	6	143	10	152
Physics	8	111	19	202	5	154	8	121	10	149
Elementary Science	..	...	..	...	5	105	..	...	..	...
General Science	..	...	..	...	..	...	8	181	..	...
Physiography	..	...	19	195	..	...	..	...	..	...
Art	4	100	20	180	3	122	7	96	10	120
Physical Education	..	...	20	95	4	63	3	61	3	60
Agriculture	..	...	4	167	3	125	7	85	..	...

NOTE: For Ontario a random sample of 20 schools was used. In the other provinces all the schools were used which reported their data in satisfactory form. Some of the subjects infrequently offered do not appear in this table.

TABLE J

Pupils in Public Schools Taking Certain High School Subjects, 1923[1]

Subject	Nova Scotia	New Brunswick	Ontario	Saskatchewan	Alberta	British Columbia
English	12,090	3,041	51,938	4,660	5,341	9,159
Algebra	11,760	2,895	33,720	4,535	5,223	8,158
French	8,028	2,786	40,992	3,716	2,619	7,351
History	6,073	3,190	40,928	4,370[3]	5,700	4,032
Physical Culture	....[2]	....	50,823	3,162	3,282	....
Latin	4,606	2,188	39,003	3,318	1,999	5,496
Geometry	6,075	2,855	23,653	4,559	5,266	7,959
Arithmetic	9,488	2,350	15,306	4,076	3,469	5,255
Geography	5,498	3,190	19,371	1,703	1,817	4,038
Art	4,716	940	15,627	1,172	3,077	3,736
Botany	2,898	2,893	14,563	795	....	3,021
Physics	5,666	1,143	10,581	1,711	1,296	3,162
Chemistry	2,098	1,102	9,235	1,520	1,220	4,710
Physiography[4]	....	....	13,804	5,736	....	....
Reading	....	....	.....	1,621	....	9,154
Zoölogy	....	....	10,313	124	....	....
Elementary Science ..	....	1,143	.....	3,147	3,877	....
Manual Training	....	....	3,797	551	378	3,033
Bookkeeping	....	1,255	4,337	379	251	979
Household Science ..	....	....	3,526	789	672	1,740
Physiology	....	1,181	.....	3,655	....	121
Agriculture	465	....	2,239	522	898	334
Typewriting	....	....	2,430	295	320	996
Stenography	....	....	2,489	213	317	998
Trigonometry	343	123	1,898	439	370	148
Military Drill	1,149	....	.....	1,011	1,060	....
Business Law, etc. ...	....	....	2,060	....	67	629
Music	....	....	.....	1,740	733	....
German	197	....	1,835	28	64	16
Practical Mathematics	1,917	....	.....	....	....	....
Greek	78	54	240	....	....	17
Spanish	....	....	330	....	....	....
Total Sampled	12,088	3,041	53,508	5,736	5,790	9,220

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[1] From data in Annual Survey of Education in Canada, 1923, p. 44.

[2] The Dominion Statistician notes that a blank does not necessarily mean that the subject was not taught. It merely means that it was not reported.

[3] The figure given in the Survey is 10,370. This figure is obviously an error as it is nearly twice as great as the number of pupils sampled. The figure included is an arbitrary one which must be somewhere nearly correct.

[4] The numbers studying physiography in Ontario have been added to the table from the Report of the Minister of Education, Ontario, 1924, pp. 184 and 232.

[5] In this study reading has not been considered separately from English.

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